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# Current History

A WORLD AFFAIRS MONTHLY

MAY, 1980

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# Current History

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# Current History

MAY, 1980

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*How can the interests of the American consumer best be served? Seven articles in this symposium evaluate the interests of the consumer, the role of government and the responsibilities of the consumers themselves. As our introductory article points out, "Support for consumer protection regulation appears to be peaking out." Nonetheless, "The continuing flow of new technology and a large and impersonal marketplace make new problems certain," and "a variety of consumer organizations and regulatory agencies remain in place to monitor these problems."*

## Consumer Protection: Yesterday, Today and Tomorrow

BY ROBERT O. HERRMANN

*Professor of Agricultural Economics, Pennsylvania State University*

UNTIL about a century ago consumers had little need for help in protecting themselves. They bought a limited list of relatively simple products from local tradespeople they knew well. With the development of modern technology and large-scale enterprises, new and complicated consumer problems have arisen, out of the complexity of the things consumers buy and the nature of the marketplace in which they buy them.<sup>1</sup>

An increasing proportion of consumer purchases are complex and difficult to judge; they often involve mixtures of ingredients, elaborate electronic circuitry, or the application of esoteric scientific findings. The staple purchases of yesteryear—coffee, sugar, nails and a dress fabric—make up a relatively minor portion of purchases today. In the past, it was possible to examine and judge most products before purchase, since many products were sold in bulk, unpackaged. Usually, those that could not be evaluated before purchase could be evaluated easily on the basis of their performance.

Today's consumers still buy many things that can be evaluated by observation or on the basis of experience; but they buy more and more items whose quality and performance must be taken on faith. It is difficult for consumers to know whether the prescription drug they take really is effective. The same

problem applies to judging services, especially professional services. Consumers rely on professionals both to diagnose a problem and to specify a treatment. Few consumers are in a position to evaluate how well these services have been performed.

Other problems arise from the nature of the production process. Most consumer products are mass-produced in large quantity in plants that are far from their purchasers. While consumers benefit from the economies of large-scale production, they may find that none of the brands offered meet their needs in the way a custom-made product would. The mass-production process also magnifies the problems created by product defects. If a mass-produced product proves defective there may be heavy economic losses. A large number of units may be involved, and if repairs, replacements or refunds must be made, the process is likely to be complicated and costly for both manufacturers and consumers.

The distribution process adds further problems. Most products are moved through complex channels of distribution and sold by large-scale retailers. Typically sales outlets are self-service with, at most, a few clerks who can provide information and guidance for making a selection. The consumers who experience problems have difficulty knowing just where to turn for help and what the specific obligations of retailers and manufacturers are. Should complaints be directed to the local store? The store's headquarters? The manufacturer?

The complexity of today's products and frequent changes in product design also may make products

<sup>1</sup>Causes of consumer concern are outlined in detail in David A. Aaker and George S. Day, "A Guide to Consumerism," in David A. Aaker and George S. Day, editors, *Consumerism: Search for the Consumer Interest*, 3d edition (New York: Free Press, 1978), pp. 2-18.



more susceptible to incorrect use or misuse. The result may be unsatisfactory performance or, in more serious cases, health and safety hazards.

In addition to these problems that plague the relationships of sellers and buyers, another group of problems arises from the indirect effects of the production-consumption process. These spillover effects include such costs as damage to local water supplies from chemical wastes from the production process and damage to public health and property from auto exhaust fumes. The costs of spillovers do not fall only on the manufacturers and users. Instead they affect the whole community and become the concern of all.

### IS GOVERNMENT INTERVENTION NECESSARY?

Economic and political conservatives argue that the protection of consumers is best left to the operations of the free market.<sup>2</sup> They argue that market forces will work to resolve most consumer problems without government involvement. If producers conspire and push prices up, new substitutes will be found to break their monopoly power. If a product is inferior or unsafe, declining sales will force the manufacturer to make improvements. And if a product should prove injurious, legal suits will discipline the seller and provide consumer redress. Government involvement, it is argued, may make matters worse because it lessens competition. Large firms will survive because they are better able to deal with the legal complexities and costs of new regulations, while small firms will be forced out of business. Conservatives also argue that regulation interferes with freedom of choice, including the freedom to pay less for a potentially less safe product in return for accepting more risk.

Others have countered these arguments by suggesting that the marketplace does not always operate competitively.<sup>3</sup> Market failures may create a need for corrective measures. Competition works, they note, only if the market contains large numbers of sellers who are aware of consumer concerns and needs. If a market is dominated by a monopoly, government intervention may be desirable instead of making consumers wait for potential corrective forces to operate in the long run.

The market, it can be argued, does not deal effectively with the problem of spillovers. Spillovers like pollution create costs for others in the community besides producers and consumers. As a result, the

market price represents only part of the social cost of the product. Since producers and sellers only have to bear part of the true cost of the product more of it may be produced and consumed than is desirable from the standpoint of the community as a whole. For example, if the whole community is forced to share the costs of injuries in motorcycle accidents through higher insurance premiums, then the community should have some right to regulate the use of motorcycles.

Government intervention also may be necessary because certain kinds of consumer protective services are what economists label public goods or collective goods. An example is restaurant health inspection. Such services are indivisible; they cannot be divided up and sold only to those who are concerned about sanitation. If consumers are asked individually to pay for the service each one will be tempted to wait for the other fellow to pay, knowing they still will get the benefits of the inspection. In cases like this, when it is impossible to control "free riders," it may be desirable for the government to step in to finance needed services with tax revenues. Government intervention also may be desirable for the regulation of utilities. Large-scale production of such services is most efficient; costs to consumers will be lowered if a single producer is granted a monopoly and is allowed to operate under regulatory supervision.

Further, competition works best if consumers are well informed and are motivated to choose wisely. Sellers often neglect to provide the information necessary for intelligent choice and instead emphasize trivial product differences and emotional appeals in their advertising. It can also be argued that the American court system as it now operates is not an adequate channel for the redress of consumer problems. Legal action is costly and time consuming. If consumers were to depend solely on the courts for redress many small consumer problems would go unresolved.

### THE TOOLS OF REGULATION

A variety of tools have been developed to regulate products and the marketplace. Some are designed for preventive purposes or to help ensure redress, while others are designed as punishment devices.

Consumer protection regulation has focused largely on the prevention of problems and abuses. A basic tool in prevention has been the imposition of standards—criteria against which something can be judged or evaluated.<sup>4</sup> Standards may be used in a variety of ways. They may be used as the basis for prohibiting the manufacture and sale of products judged unsafe. Or they can form the basis for a system of ranking by relative quality as is true of food grades. Standards fall into two general categories: (1) specification standards that set down design features that must be included and particular procedures that must

<sup>2</sup>See for example Milton Friedman and Rose Friedman, *Free to Choose: A Personal Statement* (New York: Harcourt Brace Jovanovich, 1980).

<sup>3</sup>Ralph Nader, "The Great American Gyp," in David A. Aaker and George S. Day, *op. cit.*, pp. 39-43.

<sup>4</sup>For a discussion of the role of standards see Ernest S. Rosenberg, "Emerging Issues in Standards and Industry Self-Regulation," in Robert N. Katz, editor, *Protecting the Consumer Interest: Private Initiative and Public Response* (Cambridge, MA: Ballinger, 1976), pp. 141-159.

be followed; (2) performance standards which, in contrast, specify the outcome which is desired but do not indicate specifically how it must be attained. Our current meat inspection procedures are essentially design standards; slaughtering plant design and sanitary procedures are set down in detail. Some critics feel that it would be simpler to specify permitted microbial levels and let meat packers and retailers decide on the best and cheapest ways to meet these standards.

Information and education are two other related tools. Government may require that certain kinds of information be provided and may facilitate the dissemination of information while at the same time working to control misinformation, fraud and deception. Government also can assist consumers by facilitating education on how to obtain and use consumer information and how consumers can work to protect their own rights and those of others. Advocates of increased consumer education and information have been discouraged by evidence that when new programs are instituted the major users are upper-income and better-educated consumers. There is, however, new evidence that, over time, usage increases in other groups.<sup>5</sup>

Antitrust action to preserve competition is another type of preventive action. Such action is concerned with controlling price-fixing, artificial limitations on output, and restrictions on distribution. Antitrust regulation focuses on the economic performance of an industry. Economic regulation has developed rather separately from what has been labeled social regulation concerned with health, safety, information and redress issues. Because the scope of consumer protection problems and regulation is large, this issue of *Current History* is focused solely on social regulation.

A second set of regulatory tools deals with the problem of ensuring fair resolution for consumers' problems. The courts have been the traditional avenue for consumer redress.<sup>6</sup> Because the regular court system was not well suited to handling minor claims, small claims courts were instituted to handle minor problems expeditiously.

<sup>5</sup>Bruce F. McElroy and David A. Aaker, "Unit Pricing Six Years After Introduction," *Journal of Retailing*, vol. 55, no. 3 (Fall, 1979), pp. 44-57.

<sup>6</sup>For a discussion of the role of legal action in consumer protection see Kenneth M. Dolbeare and Patricia Dolbeare, *American Ideologies: Competing Political Beliefs of the 1970's*, 3rd edition (Chicago: Rand McNally, 1976), pp. 84-87.

<sup>7</sup>Richard P. Nielsen, "Should Executives Be Jailed for Consumer and Employee Health and Safety Violations?" *Journal of Consumer Affairs*, vol. 13, no. 1 (Summer, 1979), pp. 128-134.

<sup>8</sup>See Ralph Nader "The Great American Gyp," in David A. Aaker and George S. Day, *op. cit.*, pp. 43-52.

<sup>9</sup>Murray L. Weidenbaum, *The Future of Business Regulation: Private Action and Public Demand* (New York: AMACON, 1979), pp. 11-32.

During the 1960's and 1970's it was recognized that consumers' needs for redress were not being fully met by the court system. New emphasis was placed on recalls for unsafe products. Since recalls usually involve repairs, replacement, or refunds they serve both as a redress device and as a preventive measure. New efforts also were made to make warranty terms clearer.

Ensuring access to government services and monitoring their quality have become more important problems, because such services have come to play a more important role in people's lives. Traditionally, legislators at both the state and federal level have helped consumers with problems in getting services and have handled complaints about the quality of government services. Because handling such problems has become an increasing burden, some state and local governments have created ombudsmen to receive and resolve such complaints.

Punishment has been emphasized less often than prevention or redress as a tool for consumer protection. Many suspected violations of consumer protection laws and regulations are settled informally with agreements between the firm whose practices have been challenged and the regulatory agency. Another frequently used procedure is the consent agreement, in which a firm formally agrees to cease engaging in a challenged practice but admits no wrongdoing. In more severe cases, courts and regulatory bodies may impose fines. The use of criminal penalties to enforce consumer protection laws is a rarity. Some consumer advocates have, however, proposed fines and imprisonment for executives who violate health and safety regulations as a way of giving protection laws more teeth.<sup>7</sup>

## SELECTION OF REGULATORY TOOLS

The choice of regulatory tools depends both on one's political perspective and one's assessments of the net benefits of regulation. Those at the conservative end of the political spectrum prefer to hold government regulation to an absolute minimum. They believe that the threats to freedom of government intervention in the marketplace outweigh possible benefits. They tend to be less hostile to consumer information and education than to other regulatory tools, especially if they are voluntary. Education and information programs appeal to them because they are seen as contributing to individual independence and self-reliance and because they facilitate competition. Political liberals, on the other hand, see a need for government intervention in many areas with the full kit of regulatory tools.<sup>8</sup>

In assessing the net benefits of regulatory effort to resolve a problem, the benefits of a proposed regulation must be weighed against its costs,<sup>9</sup> including such direct or first-order costs as (1) the compliance

costs of the firm, which includes new equipment, design costs and legal costs; and (2) consumer costs like higher prices and reduced operating efficiency or effectiveness. These direct costs of regulation are probably the easiest costs to conceptualize and the easiest to measure.

In addition, there are indirect or second-order costs. These include the costs inflicted on others besides the firm producing a regulated product and the consumer using it. Indirect costs include the workers' loss of jobs if regulations increase prices and purchases decline. They also include the costs to taxpayers of government enforcement activities. Even more subtle effects of regulation must also be considered. These are induced or third-order costs, like the costs of reduced economic activity if declining purchases of a regulated product affect the overall level of economic activity.

While it is easy to specify the benefits we hope to gain from a regulation, it is not always easy to put a dollar estimate on them. Benefits include such worthwhile goals as the prevention of premature death, the elimination of medical treatment costs, and consumers' savings resulting from more informed choices. The measurement of benefits is difficult for a variety of reasons. One is that some benefits like "quality of life" are intangible. While rough values can be put on protecting property and health it is difficult to assign a value to the sight of blue sky overhead. The measurement of benefits is also complicated by conceptual problems. How are we to measure the value of a human life?<sup>10</sup> While we may say a life is priceless—it is clear that this is not and cannot be so. Clearly, there is a point at which we decide that an intersection does not need a traffic light or that additional auto safety equipment is too expensive.

Even if we can conceptualize the benefits of a regulation, we may have difficulty actually measuring them. The problems in assessing the risks of chemicals in pesticides, drugs and food additives illustrate these difficulties. It may be years before the effects of a particular chemical show up as cancer or a birth defect. This makes the establishment of a clear link between cause and effect difficult. The problem of measurement is further complicated because the effects may depend on scale of use. Small amounts of a pesticide used under strict control may be relatively harmless. Under large-scale use, however, the pesticide may enter the food chain and prove a threat, like DDT. Other measurement difficulties may occur if the effects of a chemical are dependent on other

factors. The effects of inhaling asbestos fibers, for example, are more severe in smokers than in non-smokers.

Because many benefits of regulation are difficult to conceptualize and estimate, benefits may be underestimated. Costs of regulation, however, are usually easier to estimate. The overall result may be that the net benefits of regulation will be underestimated and necessary regulation will be shelved.

The value of the benefits and costs of a regulation does not depend only on the size of the costs and the benefits, it also depends on their timing. Policymakers, like the rest of us, put more value on an immediate payoff than on a more distant one. A dollar of benefits this year is worth more to us than a dollar of benefits we will not receive for five years. Conversely, an immediate cost is less appealing than one which will be paid five years hence.

While economists and technical experts can estimate the net benefits of a regulation and the probable distribution of costs and benefits, the final decisions are political. If the dangers of a particular product appear to outweigh all its possible benefits, a decision may be made to prohibit it altogether. Alternatively, it may be decided to allow continued production and use if consumers are made more fully aware of the risks involved. This approach allows free choice but helps ensure that it is informed choice and is the rationale behind the labeling on cigarette packages.

The decision about who is to bear the costs and who is to receive the benefits of regulation is also essentially political. In general, those most directly involved with production and consumption are forced to bear more of the costs they previously had been spreading to others. In evaluating the desirability of a regulation, the regulatory tools chosen should be the most effective ones. If our goal is reducing auto-related deaths we need to assess the effects of all causes of deaths—auto design, deficient driver skills and performance and highway hazards. Only then can we be certain we are taking the steps that will save the most lives at the lowest cost.<sup>11</sup>

In legislating to provide consumer protection, the

(Continued on page 226)

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**Robert O. Herrmann** conducts research on food consumption behavior and consumer problems at the Pennsylvania State University. He has just completed a term as editor of the *Journal of Consumer Affairs*, the publication of the American Council on Consumer Interests, the national organization of professionals in consumer education and consumer affairs. He is coauthor of the widely used high school consumer text, *The American Consumer: Issues and Decisions* (New York: McGraw-Hill, 1978). From 1974 to 1977, he served as a member of the board of directors of Consumers Union, publisher of *Consumer Reports*.

<sup>10</sup>For a discussion of some of the problems of such efforts see Fred Hapgood, "Risk Benefit Analysis: Putting a Price on Life," *Atlantic Monthly*, vol. 243 (January, 1979), pp. 33-38.

<sup>11</sup>Walter Guzzardi, Jr., "The Mindless Pursuit of Safety," *Fortune*, vol. 99, no. 7 (April 9, 1979), pp. 54-64.

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*"Many consumers are dissatisfied with the products and services available today; one dramatic measure of their discontent is an increasing spiral of consumer-initiated lawsuits."*

# The Consumer as Plaintiff

BY BARRY B. SCHWEIG

*Associate Professor of Finance and Insurance, College of Business Administration, University of Nebraska*

EVERY American consumes products and services every day of his life. Americans constantly consume products and services at home, at work, or on vacation. As a nation, Americans are perhaps the most sophisticated consumers on earth. Yet they are for the most part unhappy consumers.

As a group, Americans are lodging a steadily increasing volume of complaints—by telephone, by letter, by face-to-face confrontation and, in the extreme, by lawsuit. They complain to business, to consumer groups, to federal and state government agencies, and to each other. They seem to be angry and upset about dangerous and defective products, unsafe working conditions, threats to the environment, threats to personal health and well-being. They are further angered by bait and switch sales techniques, shoddy home and auto repairs, and the high cost and mediocre quality of practically everything they buy and consume.

Some measure of their discontent can be gauged from the fact that Americans filed over seven million civil law suits in a recent single year.<sup>1</sup> The lawsuits included consumers litigating against product manufacturers, distributors and retailers, and patients suing their physicians, dentists and other health care providers. Dissatisfied clients sued their attorneys, their accountants, their architects; none of the professions seem to be immune, and even the clergy were sued by disgruntled parishioners. Schoolteachers and school boards were brought to court by students and their parents. Husbands and wives sued each other; parents sued children; and children sued both parents and siblings.<sup>2</sup>

The scope and magnitude of this litigious behavior raise several troublesome questions. What are the "costs" to society of civil litigation on an increasingly large scale? Is litigation the most efficacious approach to the problem, at least where consumer health and

safety are major concerns? Are there any desirable alternatives to litigation for angry or injured consumers?

## A CHRONICLE OF CONSUMER LAW AND LITIGATION

Consumer law and litigation were simple matters in pre-industrial society. Products and services were rudimentary at best, and the rights and duties of craftsmen and consumers were well known and approximately equal before the law. In a product-related dispute of a product injury, local customs and the common law provided speedy and uncomplicated adjudication without complex or lengthy proceedings. The spirit of the law and the nature of litigious behavior of this period can be described as follows:

By "particular" law I mean that which an individual community lays down for itself . . . ; and by "universal" law I mean the law of nature. For there is a natural and universal notion of right and wrong, one which all men instinctively apprehend . . . .<sup>3</sup>

During the Industrial Revolution, however, society mandated a substantial shift in the relationships between the producers and the consumers of goods. Unlike the previous near equality of rights and responsibilities under the law, consumers were made to suffer the burden of dangerous and defective products. During this era (circa 1760 in Great Britain and later in the United States), society apparently decided that the protection of "infant industries" and industrialists was more important than the welfare of consumers and workers. Law during this period could be characterized as follows:

Law is the totality (a) of the rules of conduct, expressing the will of the dominant class . . . and (b) of customs and rules of community life sanctioned by state authority . . . in order to guard, secure, and develop social relationships and social orders advantageous and agreeable to the dominant class.<sup>4</sup>

In the modern era of post-industrial society, the rights and responsibilities of consumers have become more favorably balanced against the rights and responsibilities of product manufacturers, distributors and retailers. For consumers, the advantageous shift in the law began with Judge Benjamin Cardozo's ruling in the case of *Mac Pherson v. Buick Motor Company* (1916).<sup>5</sup> This case involved the liability of a manufac-

<sup>1</sup>U.S. News and World Report, December 4, 1978, p. 50.

<sup>2</sup>Ibid., pp. 50-53.

<sup>3</sup>Aristotle, *Rhetoric*. Quoted in Stephen D. Ford, *The American Legal System* (St. Paul: West Publishing Co., 1970), p. 5.

<sup>4</sup>Andrei Y. Vyshinsky, *The Law of the Soviet State* (1948) p. 50, quoted in Ford, *op. cit.*, p. 6.

<sup>5</sup>217 N.Y. 382, 111 N.E. 1050 (1916).



turer of an automobile with a defective wheel to the ultimate purchaser of the automobile, who was injured when the defective wheel collapsed. Judge Cardozo ruled that:

If the nature of a thing is such that it is reasonably certain to place life and limb in peril when negligently made, it is then a thing of danger. Its nature gives warning of the consequences to be expected. If to the element of danger there is added knowledge that the thing will be used by persons other than the purchaser and used without new tests, then irrespective of contract, the manufacturer of this thing of danger is under a duty to make it carefully.

The shift in favor of consumer-plaintiffs continued with the development of additional consumer "offenses," like breach of expressed or implied warranties in products-related lawsuits. The culmination of the shift in favor of consumers and against product producers can be conveniently reckoned with the inception and spread of the doctrine of strict liability in tort (1965).<sup>6</sup> Today's law and legal system—a system which apparently provides a powerful stimulus for consumer-initiated lawsuits, can be conceptualized as follows:

Law is "not a brooding omnipresence in the sky," but a flexible instrument of social order, dependent on the political values of the society which it purports to regulate.<sup>7</sup>

In addition to developments that greatly facilitated consumer-plaintiff legal actions, at least five additional factors contributed to the flood of consumer-initiated lawsuits, including a growing claim consciousness and concern with safety developing among consumers; the sheer volume of products and services available today; and an apparent oversupply of under-employed attorneys.

### CLAIM CONSCIOUSNESS

Before the turbulent 1960's, the consumer and the legal profession largely confined their "claim consciousness" to the million dollar lawsuits spawned by sensational divorce actions and the ubiquitous bodily injury automobile accident. Cocktail conversation in-

cluded lurid descriptions of the fabulous awards that awaited those individuals fortunate enough to marry—and subsequently divorce—wealthy partners. Alternatively, there was always the possibility of being involved in a million dollar automobile bodily injury settlement. Attorneys played central roles in both of these dramas. A skillful attorney acting alone might in both instances command a million dollar judgment from a jury. Television glorified these attorneys with series like "Perry Mason" and "The Defenders."

With the advent of divorce liberalization laws and the passage in several states of "no-fault" automobile liability laws, attorneys had to seek new areas of potentially profitable legal combat. One of the most exciting areas proved to be products-related injuries. The often complex products liability case lured attorneys and the media. Stories of "blood and squish" injuries, interlaced with multimillion dollar judgments—often involving the largest and most respected business concerns in America—here was an arena worth investigating!

Although products liability lawsuits were rare before the 1960's, by 1963 nearly 50,000 products liability lawsuits were filed in a single year. The number of products liability lawsuits had swollen to 100,000 per year by the end of 1966. By the end of the 1970's, the rate of products liability lawsuits was thought to be still increasing.<sup>8</sup> Moreover, not only had the frequency of products liability lawsuits been increasing, but jury awards had also been subject to rapid increase. Taken together, these consumer successes in the courts motivated others. If other people can win, why can't I? Such attitudes—claim consciousness if you will—undoubtedly explain why so many consumers (and their attorneys) are willing to litigate in the area of a product-related loss.

An additional impetus for the expansion of consumer litigation may be found in the publicity generated by federal consumer safety legislation. For example, the 1970 Occupational Safety and Health Act and the Consumer Product Safety Act of 1972 stimulated consumer claims and lawsuits.<sup>9</sup> And, the deluge of media coverage devoted to ecological and health hazards also greatly contributed to consumer interest in and concern about product and service safety.

The sheer volume of products and services available today is another cause of consumer-initiated lawsuits. The bountifulness of science and modern technology, combined with consumers' penchants for gadgets and convenience, results in a staggering number of new products and services each year. These new products and services represent potential hazards. Mass production techniques have also resulted in the dissemination of less expensive products of every variety, thus creating additional risks.

The intense competition for business profitability and survival may also contribute to angry or injured

<sup>6</sup>Restatement of Torts, Section 402A. Special Liability of Seller of Product for Physical Harm to User or Consumer (1965).

<sup>7</sup>Friedman, *Law in a Changing Society*, (1959) p. xlii, quoted in Ford, *op. cit.*

<sup>8</sup>There is controversy surrounding the total volume and distribution over time of products liability lawsuits. See John Maes, "At Last! Insurers Divulge Product Liability Loss Data," *Business Insurance*, March 19, 1979, pp. 1 and 65, and Robert C. Goshay, "An Overview of the Products Liability Crisis," *Best's Review*, P/C Edition, January, 1978, pp. 17-18 and 66-68.

<sup>9</sup>S.J. Paris, "Analysis of the Consumer Product Safety Act of 1972 and Its Effects on Products Liability Litigation," *Products Liability: An Area of Growing Concern* (Pennsylvania: The Society of Chartered Property and Casualty Underwriters, Inc., 1976).



**TABLE 1: Federal Agencies Concerned with Dangerous and Defective Consumer Products**

BOR	Bureau of Outdoor Recreation/USDI
C&MS	Consumer and Marketing Service/USDA
DOL	Department of Labor
EPA	Environmental Protection Agency
FAA	Federal Aviation Administration
FDA	Food and Drug Administration
FTC	Federal Trade Commission
HEW	Department of Health, Education and Welfare
HSMHA	Health Services and Mental Health Administration/HEW
Mines	Bureau of Mines/USDI
NBS	National Bureau of Standards/USDC
NHTSA	National Highway Traffic Safety Administration/DOT
OCA	Office of Consumer Affairs
OCD	Office of Child Development/HEW
OCS	Office for Consumer Services/HEW
OEO	Office of Economic Opportunity
RSA	Rehabilitation Services Administration/HEW
SRS	Social and Rehabilitation Service/HEW
USDA	Department of Agriculture
USDC	Department of Commerce
USDI	Department of the Interior
USDJ	Department of Justice
VA	Veterans Administration
WSA	Workplace Standards Administration/DOL
YDDPA	Youth Development and Delinquency Prevention Administration/HEW

Source: Office of Consumer Affairs, Washington, D.C. 20506

consumers. Reduced expenditures for quality control and for employee training, combined with excessive "puffery" from advertising and promotion techniques, lead to further dissatisfaction, viz., the overselling of a firm's product or service capabilities.

### TOO MANY ATTORNEYS?

A controversial factor that may be instrumental in the proliferation of consumer-initiated lawsuits specifically concerns attorneys. In 1958, there was one attorney for every 1,800 Americans. In 1973, there was one attorney for every 1,200 Americans. Today, however, there is now one attorney for each 500 Americans. The number of attorneys in the United States may constitute a glut on the market, which may contribute to the growth in litigation.<sup>10</sup>

There are many costs associated with consumer litigation: the costs to business; the costs to government; and the costs to society as a whole. The costs of defending against a consumer-initiated lawsuit are high. Scarce business resources must be diverted to help defend a firm against potentially catastrophic judgments. Businessmen are well aware of these costs and every consumer pays more for the goods and services he consumes. Another serious consequence of consumer litigation is the skyrocketing cost of liability insurance to business and professional people. Small

firms and health care providers are particularly susceptible to escalating insurance premiums.

Besides the direct costs associated with consumer litigation, the indirect costs of practices like "defensive" medicine—where a health care practitioner orders many medical tests and X-rays in order to provide a defense in case of a later medical malpractice lawsuit—must also be taken into account. The threat of consumer litigation may also be sapping the creativity and imagination of American industry. For example, desirable new products, helpful drugs and medicinal techniques—perhaps innovative solutions to many of our most troublesome problems—may never be developed or available for consumption primarily because of the threat of potential litigation.

Since government must provide the courtrooms, the judges, the juries and all the other accoutrements of a modern civil lawsuit, government must also cope somehow with the costs of civil litigation on an increasingly large scale.

Government "pays" for consumer litigation in other ways. Once protected by immunity from lawsuits, all levels of government are now susceptible to negligence lawsuits, for failure to provide safe conditions, and for inadequate fire, police and medical services.

Because of the seemingly constant threat of legal action, public servants may come to resent the public that they serve. The increase in public servant strikes—among teachers, firemen, and police—may be symptomatic of this aspect of the cost of consumer lawsuits.

Besides the costs already mentioned, any discussion of the full impact of escalating consumer litigation would be incomplete without probing the possible effects of consumer litigation on the concept of individual and group integrity. In a mobile society, the influence of family, church, and neighborhood are often diminished. A reluctance to sue the family physician, the local clergyman or the child's teacher was a manifestation of a society where individuals believed that personal and group integrity helped bind that society together for the common good. Today, however, these beliefs are often replaced with feelings like "everyone is getting a share of money from lawsuits, why shouldn't I?" Time alone will reveal the ultimate costs to society of consumer litigation.

### ARE CONSUMER LAWSUITS EFFICACIOUS?

Despite sizable problems, consumer lawsuits have accomplished much that is laudable. Business and government are now far more sensitive to consumer wants and needs. Thanks to the threat of lawsuits, citizen concerns about protecting the environment and defending consumer privacy rights receive consideration instead of lip service. Consumer lawsuits have also been very successful in helping to destroy

<sup>10</sup>"Why Everybody Is Suing Everybody," *U.S. News & World Report*, December 4, 1978 p. 51.

discrimination with respect to housing, employment and education. And where consumer health and safety is concerned, the consumer as plaintiff has made spectacular gains.

When business and the legislative and executive branches of government failed to aid consumers who suffered product- and service-related injuries, consumers turned to the courts. Naturally, once the legislative and executive branches of government realized that consumers were committed to protecting themselves against dangerous products and services, they responded with a plethora of consumer protection laws and governmental agencies.

A list of some of the federal government agencies concerned with dangerous and defective consumer products is provided in Table 1.

### ALTERNATIVES TO CONSUMER LITIGATION

Two alternatives to the present tort liability system approach of relying on litigation to protect the consumer against dangerous products and services should be evaluated. The first alternative is to eliminate fault from product or service-related consumer losses and rely instead on a no-fault criteria.<sup>11</sup> The second approach is to change the present scope of federal intervention into the field of dangerous and defective products and services.<sup>12</sup>

Under a no-fault approach, an insurance company would provide coverage for economic loss to its insureds irrespective of fault, for those who suffer products- or services-related losses. The coverage would be for medical expenses, including rehabilitation and wage loss. Nothing would be paid for non-economic loss, such as pain and suffering. Nor would anything be paid if the insured's economic loss had already been paid for from another source, like disability or health insurance. In exchange for guaranteed recovery under no-fault, the insured would transfer to his or her no-fault insurer the entire claim against the manufacturer, distributor or retailer of the product or service which caused the loss. The advantage to the consumer of this type of no-fault is the guarantee of reimbursement for loss, without the necessity of incurring attorney's fees or other litigation expenses. The disadvantage to the consumer is that the amount of recovery under no-fault might be less—since there would be no recovery for non-economic loss and no duplication of recovery.

Robert B. Reich, the director of policy planning at

the Federal Trade Commission, is trying to induce the federal government to develop an alternative approach to the regulation of dangerous products and services. He advocates regulation only if market forces (of supply and demand) do not induce sellers to prevent consumer injuries. According to Reich's analysis, when the cost of an accident caused by a product or service that injures a consumer is less than the accident avoidance cost, the supplier of the product or service will prefer to pay the cost of a claim or a lawsuit rather than to improve his product or service. Reich wants the law changed so that the costs associated with dangerous or defective products and services become so huge that suppliers will be compelled to invest in accident avoidance. Thus accident avoidance would become cost-justified, like any other consumer-demanded product feature. This policy, Reich concludes, would make the market more responsive to consumer desires for safety.

The advantage to the consumer from Reich's approach is that market forces, rather than the federal government, would compel manufacturers, distributors and retailers to make their product safer "voluntarily," without the necessity of increasing the size or number of new federal consumer protection agencies. The disadvantage to the consumer is that Reich's approach might take longer to work and, in the short run at least, increased government intervention might more quickly eliminate dangerous products and services.

### SUMMARY AND CONCLUSIONS

Many consumers are dissatisfied with the products and services available today; one dramatic measure of their discontent is an increasing spiral of consumer-initiated lawsuits. A number of factors are related to the increasing frequency and severity of the lawsuits; most significant is the evolution of tort law in favor of the consumer. Other important factors include a growing claim consciousness among consumers, new concerns about product safety, the sheer volume of products and services available today, and an apparent oversupply of attorneys. A discussion of the costs associated with consumer-initiated lawsuits demonstrates that business, government and society as a whole all share the burden of the increasing level of consumer litigation. However, consumer lawsuits are indeed efficacious. ■

<sup>11</sup>This discussion is based upon the work of Jeffrey O'Connell, an outstanding and long-time proponent of no-fault insurance. See Jeffrey O'Connell, "No-fault Insurance: What, Why and Where?" *The Annals of the American Academy of Political and Social Science*, May, 1979, pp. 72-81.

<sup>12</sup>This discussion is based upon Robert B. Reich, "Toward a New Consumer Protection," *University of Pennsylvania Law Review*, November, 1979, pp. 1-40.

**Barry B. Schweig** is the author of articles that have appeared in the *Annals of the American Academy of Political and Social Science*, the *Journal of Products Liability*, the *Journal of Insurance Issues and Practices*, among others. His primary interests are risk management, product liability problems, and insurance firms as financial intermediaries.

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*Writing of consumer protection against misuse of medicinal drugs, this specialist calls for "a flexible partnership among the physician, the pharmacist, the regulator and the drug manufacturer," noting that "the patient should be a participant, not a pawn in the drug choice process."*

# Medicinal Drugs: Risks and Regulations

BY MARK C. HORNBOOK

*Senior Research Manager, National Center for Health Services Research, Department of Health, Education and Welfare*

THE taking of a medicinal drug always involves a certain element of risk.\* The drug may cause undesired side effects, which can be very serious, like the immunosuppressive action of corticosteroid hormones, or relatively minor, like the "cotton mouth" effect of anticholinergic drugs. The drug may interact with food or other drugs to cause serious complications. The product may be impure, containing toxins or bacteria that cause further disease. The drug may simply be ineffective, delaying necessary treatment and wasting the patient's money. In most instances, however, the potential benefits outweigh the risks, and the drug is taken with the desired result—relief and/or cure. The question is whether this occurs because of or in spite of the regulations governing the safety and efficacy of drugs?

Many of our activities are inherently dangerous—smoking cigarettes, driving an automobile, participating in athletic events. Why then do we single out drugs for a particularly stringent set of controls on their manufacture, distribution and consumption? From what is the consumer being protected? Is there really a need to protect patients from making "bad" choices with respect to use of drugs?

Under a free market system, one of the requirements for maximizing consumer welfare is to maximize the number of choices (i.e., goods and services) that are available. By restricting the availability and use of drugs, we may be preventing some consumers from consuming a preferred set of goods, thus forcing them to a less preferred set. This means that their preferences do not count—we have substituted some-

one else's preferences. Because of this regulatory interference in the free market, the resource allocation system is, strictly speaking, no longer efficient. Given the presumption of consumer sovereignty, how do we justify a policy that discounts the preferences of some consumers? The case of laetrile is an example of this quandary. Should a consumer be allowed to take the responsibility for assessing the risks and benefits of a drug, as they apply to his own situation?

It has been suggested that regulation is required to correct for market failure because consumers are not informed about their choice opportunities. The typical consumer is ignorant about drugs and medical technology and needs an informed "agent" who will make the decision he would make were he fully informed. Since medical technology is so complex, it is more efficient for the consumer to delegate his decision-making authority to someone who has specialized in medicine. This role is taken by the physician.

If the physician is acting in the best interests of the patient, is drug regulation necessary? Must the government be involved in controlling the physician's range of choices? Some observers have argued that private mechanisms can be established to set standards of safety and efficacy for pharmaceuticals and to set standards for drug advertising and promotion. Physicians would demand safe, effective products and complete, accurate prescribing information. Brand names would protect the patient from impure, ineffective products marketed by unscrupulous firms, and scientific literature would counteract any misleading promotional claims. Indeed, some observers maintain that the free market can respond more efficiently and effectively than government agencies to problems arising from the use of drugs. For example, many countries have adopted less restrictive approaches to drug marketing and achieve reasonably safe and effective use of drugs.<sup>1</sup>

The issue is the "reasonable" level of safety against a toxic reaction. It can be argued that every opportunity was given to the free market system until it became very clear that government intervention was necessary to correct blatant abuses because the socially acceptable level of risk had been exceeded. Regu-

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\*The views and analysis presented in this article are strictly those of the author and no official endorsement by the National Center for Health Services Research or the Department of Health, Education, and Welfare is intended or should be inferred.

<sup>1</sup>William M. Wardell, "Therapeutic Implications of the Drug Lag," *Clinical Pharmacology and Therapeutics*, vol. 15, no. 1 (January, 1974), pp. 73-96, and Wardell, "Control of Drug Utilization in the Context of a National Health Service: The New Zealand System," *Clinical Pharmacology and Therapeutics*, vol. 16, no. 3, part 2 (September, 1974), pp. 585-594.



lations dealing with drugs have always been increased in response to some specific crisis. The two classic cases involved elixir of sulfanilamide and thalidomide.

In 1933, in response to the demand for sulfanilamide in liquid form for pediatric use, a drug company marketed the drug using diethylene glycol (a derivative of anti-freeze) as a solvent, a new application of this solvent because sulfanilamide was insoluble in all the usual solvents used at that time. Although it was known that diethylene glycol was poisonous, the company was not aware of this. The solution was checked for appearance, flavor and fragrance, but no animal testing was done to check for toxicity. Approximately 240 gallons of the drug were manufactured and 11.5 gallons were dispensed. In late 1937, the Food and Drug Administration (FDA) began to receive reports of deaths caused by this "elixir." All supplies of the drug were then confiscated and a press and radio campaign was conducted to alert the public. The confiscations were legal, not because the drug was killing people but only because it was misbranded. The "elixir" label implied that the product contained alcohol as a vehicle (solvent), but this was not the case. If the firm had labeled the product as a solution, the FDA would have been powerless to act. Over 100 children died because they took the "elixir." This tragedy had the effect of freeing the 1938 Food, Drug, and Cosmetic Act from entanglement in the Congress. The 1938 law required that a drug be proved safe for human consumption before it could be marketed in interstate commerce.<sup>2</sup>

In 1959-1960, many babies were born in West Europe with phocomelia (a condition in which an infant's arms and legs are transformed into seal-like appendages) because their mothers took the drug thalidomide during a critical stage of pregnancy. Thalidomide was being marketed as a minor tranquilizer and sleeping aid. The drug had not yet been

approved for marketing in the United States, but several hundred doses had been sent to physicians for experimental use. The FDA recalled these doses and averted the tragedy in this country.<sup>3</sup> However, the West European tragedy led Congress to pass the 1962 Drug Amendments, which added the requirement of efficacy to the criteria for approval of a new drug for marketing.

These laws and others established an extensive system for evaluating every new prescription drug before its introduction to the market. The Food and Drug Administration (FDA) employs nearly 7,900 scientists, administrators, pharmacists, secretaries and clerks and uses many nongovernmental advisory committees; it has an annual budget of over \$300 million to operate this system.<sup>4</sup> This regulatory apparatus has come under increasing criticism and scrutiny. There is concern that the new drug approval process is "over-regulated." In opening the recent series of oversight hearings on the Food and Drug Administration's procedure in approving new drugs, Representative George Brown, chairman of the House Subcommittee on Science, Research and Technology, identified three important issues:

The speed with which the FDA approves new drugs for introduction into the United States has been a frequent target of criticism by drug manufacturers seeking to market the drugs, physicians desiring to use the drugs, and consumers wanting to use the drugs or wanting protection against unforeseen side effects. It is our aim that these hearings will shed light on several issues important . . . to the Congress and the American public: First, can and should the FDA's process for approving new drugs be carried out more efficiently?

A second issue of concern to all of us is the health of the American public. Safe and effective drugs have made a significant contribution to the health of our people and in a number of cases have reduced the costs over other forms of therapy. However, the apparent slower drug approval process in the United States has brought charges of a "drug lag." . . .

A third general issue is the alleged slowdown in the rate of innovation and productivity in our country compared to other technologically advanced countries . . . [specifically] the effects of FDA regulations on innovation and productivity of the U.S. pharmaceutical industry.<sup>5</sup>

The first purpose of this article is to inform, so that a rational choice can be made; the most important aspects about the area of new drug regulation are not only the scientific and technical aspects of drugs, but also the multiplicity of policy objectives: safety, efficacy, effectiveness,<sup>6</sup> efficiency, availability, and technical progress. Not all can be had simultaneously, and none can be had without cost. We must ask ourselves about the cost-effectiveness of both drugs and their regulations.

The second part of the paper deals with the recent moves in many states to repeal their anti-substitution

<sup>2</sup>J.O. Nestor, "Results of the Failure to Perform Adequate Preclinical Studies Before Administering New Drugs to Humans," in *Oversight Hearings* (1979), pp. 1289-1294, and Wardell, "The History of Drug Discovery, Development, and Regulation," in Robert Chien, ed., *Issues in Pharmaceutical Economics* (Lexington, Mass.: Lexington Books, 1979), pp. 3-11.

<sup>3</sup>Some cases of phocomelia occurred among U.S. military families stationed in Europe during this period.

<sup>4</sup>Executive Office of the President, *The Budget of the United States Government Fiscal Year 1981, Appendix* (Washington, D.C.: U.S. Government Printing Office, 1980).

<sup>5</sup>U.S. Congress, House of Representatives, Committee on Science and Technology, Subcommittee on Science, Research and Technology, *Oversight: The Food and Drug Administration's Process for Approving New Drugs, Hearings, Ninety-Sixth Congress, First Session, June 19, 21; July 11, 1979* (Washington, D.C.: U.S. Government Printing Office, 1979).

<sup>6</sup>A distinction is sometimes made between efficacy and effectiveness to reflect ideal use versus actual use of a drug by physicians and patients.

laws.<sup>7</sup> This represents a major example of deregulation in the health care sector and therefore merits close scrutiny. Consumers are being given more opportunities to exercise their preferences regarding the selection of drug products.

As of 1968, the substitution of a drug or a brand of drug different from that prescribed by the physician was specifically prohibited by law in 47 states and was generally discouraged in the other three.<sup>8</sup> The ostensible purpose of the anti-substitution laws was the protection of the consumer against "low-quality" generic drugs and against substitution of the pharmacist's judgment for that of the physician with respect to drug product selection. The drug manufacturers argued that when a physician prescribed a particular brand of a product, he was choosing all of the relevant attributes of that product, not just the basic active ingredient. One important impact of the anti-substitution laws was to strengthen the brand names and to increase the effectiveness of a drug firm's promotional activities aimed at physicians.

Substantial price differentials arose between drugs marketed in both generic and branded versions. These price differentials prompted a reevaluation of the anti-substitution laws; some observers felt that any quality differential between the branded and the generic versions of a drug was far overshadowed by the price differential and that the patient (and the third-party insurer) ought to have the benefit of the cost-savings by selecting the lower priced generic, if so desired. By 1975, 10 states had adopted amendments to their Pharmacy Acts reducing previous prohibitions against drug substitution; it is estimated that today more than 40 states have enacted "drug product selection" legislation.<sup>9</sup>

## THE NEW DRUG APPROVAL PROCESS

The process of developing a new drug begins when a manufacturer or a clinical investigator identifies a new chemical agent that is believed to have a thera-

peutic effect. This can be serendipitous, like the discovery of penicillin, where bacterial growth was observed to be killed off by an invading mold in a contaminated culture. Or it can be a process of conscious invention, like the synthesis of new chemical compounds whose effects are hypothesized from a knowledge of molecular structure. For example, the new anti-ulcer drug, cimetidine, was created in a systematic program of chemical manipulation to develop a drug that would block the effect of histamine, which stimulated gastric acid secretion. (More than 700 different compounds were developed, tested and rejected before cimetidine was determined to be relatively effective and safe.)

The investigator then sets up a series of tests on laboratory animals to screen for primary therapeutic effects, side effects, toxicity, mutagenicity, carcinogenicity, and so on. If these tests prove satisfactory, the drug is administered to human beings, usually in a foreign country that does not have such restrictive regulations on drug testing as the United States.

In order to proceed with testing in humans in the United States, the investigator must obtain the permission of the FDA. The drug sponsor submits a Notice of Claimed Investigational Exemption for a New Drug (IND). This IND application is reviewed by the FDA to determine if the drug is likely to be safe and efficacious, based on the animal and foreign clinical (human) tests. If approval is granted, then the sponsor goes through three phases of clinical research.

In phase I, the safety of the drug is tested, first in very small doses, then increasing to the presumed therapeutic dose level, in a few healthy human test subjects who have volunteered under informed consent guidelines. Many drugs are rejected at this level because they are found to cause kidney, liver or blood disorders in some subjects. Infrequent or long-term effects are not assessed in this phase because of the relatively small number of subjects and the short time period.

In phase II, the drug is given to a few diseased patients to determine whether it has the desired therapeutic effect.

Finally, the drug enters phase III, where large-scale, double-blind, controlled clinical trials are conducted, with random assignment to treatment and placebo groups. These procedures represent more rigorous tests of safety and efficacy and they determine the preferred dosages.

After completing these testing procedures, the drug sponsor files a New Drug Application (NDA) with the FDA, requesting approval to market the drug for specified indications in interstate commerce. The NDA summarizes the results of all the animal and clinical testing and presents a proposed version of the product labeling and package insert, which instructs physicians on the use of the new drug. At this point,

<sup>7</sup>Another important area where government regulation impacts on drugs is through publicly financed health insurance programs, such as Medicare and Medicaid. Attempts to control program costs give rise to attempts to control drug prices, prescribing, and dispensing (Virts, 1979).

<sup>8</sup>Wardell, "The Drug Lag Revisited: Comparison by Therapeutic Area of Patterns of Drugs Marketed in the United States and Great Britain from 1972 through 1976," *Clinical Pharmacology and Therapeutics*, vol. 24, no. 5 (November, 1978), pp. 499-527. Task Force on Prescription Drugs, "The Drug Makers and the Drug Distributors," *Background Papers* (Washington, D.C.: Office of the Secretary, U.S. Department of Health, Education, and Welfare, 1968).

<sup>9</sup>Theodore Goldberg et al., "Evaluation of Impact of Drug Substitution Legislation," *Journal of the American Pharmaceutical Association* February, 1976, pp. 64-70, 90, and "Evaluation of Economic Effects of Drug Product Selection Legislation," *Medical Care*, vol. 17, no. 4 (April, 1979), pp. 411-419.

**TABLE 1: Average Testing Cost for NCE's Developed by U.S. Firms, by Phase of Testing (Thousands of Dollars)**

Testing Phase	Average Cost (1976 dollars)
Preclinical animal	\$ 177
Phase I clinical	304
Phase II clinical	1,611
Phase III clinical	2,828
Long-term animal	768

Source: Ronald W. Hansen, "The Pharmaceutical Development Process: Estimates of Development Costs and Times and the Effects of Proposed Regulatory Changes," in *Issues in Pharmaceutical Economics*, edited by Robert I. Chien (Lexington, Mass.: Lexington Books, D.C. Heath and Company, 1979), p. 162.

the drug has been tested on approximately 1,000 to 2,000 humans and on thousands of animals.<sup>10</sup> However, long-run tests on humans have not been conducted, nor have tests been made on infants, children, or pregnant women.

Both IND and NDA are reviewed by multidisciplinary teams of FDA scientists—physicians, pharmacologists, chemists, pharmacokineticists, biometricians and microbiologists. Significant NDA's, in terms of an unfamiliar new drug representing a potentially major therapeutic gain, are also submitted to nongovernmental advisory committees for review. The FDA decides whether to approve the NDA and, if so, under what labeling, and whether additional post-marketing studies should be performed. If the recommendation is against approval, additional studies are recommended. It has been estimated that only about 12 percent of the drugs that enter the human testing process ever reach the market.<sup>11</sup>

The new drug approval process is sometimes subjective, with negotiation and bargaining between the drug sponsor and the FDA. Data is exchanged, and

<sup>10</sup>Specifically, an NDA contains: (1) full reports of animal and clinical investigations which have been made to show whether or not the drug is safe and effective; (2) a statement of the drug's composition; (3) a description of the methods used in, and the facilities and controls used for, the manufacturing, processing, and packaging of the drug; (4) samples of the drug; and (5) a copy of the proposed labeling.

<sup>11</sup>Ronald W. Hansen, "The Pharmaceutical Development Process: Estimates of the Development Costs and Times and the Effects of Proposed Regulatory Changes," in Chien, *op. cit.*, pp. 151-189.

<sup>12</sup>The GAO found substantial variation in the workload of NDA reviewers. Fifty percent of the reviewers were assigned over 80 percent of the NDA's. However, the industry contributed to the slowness of the approval process by submitting incomplete NDA's and by not giving sufficient priority to correcting deficiencies in their NDA's.

<sup>13</sup>Gregory J. Ahart, "Statement on the Food and Drug Administration's Drug Approval Process," in *Oversight Hearings*, *op. cit.*, pp. 7-27.

<sup>14</sup>Fred Wegner, "Testimony on the FDA's Process for Approving New Drugs and General Accounting Office Study," in *Oversight Hearings*, *op. cit.*, pp. 389-392.

<sup>15</sup>Hansen, *op. cit.*

interpretations of test results are debated. Often, reasonable disagreements arise. This gives rise to charges that the FDA is slow, inefficient and arbitrary. In an investigation of the FDA's new drug approval process, the General Accounting Office (GAO) noted the following industry criticisms: (1) FDA guidelines are not precise and are therefore subject to varying interpretations; (2) FDA changes reviewers during the NDA review process, which slows the process; (3) scientific and professional disagreements between FDA and industry are not readily resolved; and (4) FDA communications to industry are slow,<sup>12</sup> and there are long periods before the company is notified of any deficiencies.<sup>13</sup>

On the other hand, critics charge the FDA with being too lax in screening new drugs:

A criticism of the U.S. drug approval process shared by a number of consumer advocates as well as FDA scientists is that the agency permits too many superfluous, less than effective and unimportant drugs into the market place. Too many drugs can mean less knowledge about the few important drugs and result in irrational prescribing, more chance for inferior therapy, and economic waste.<sup>14</sup>

The requirement that a drug sponsor must obtain approval from the FDA has many secondary effects on the industry, some of which run counter to other public policy objectives. The conflict among objectives creates a dilemma that must be approached very cautiously.

The cost of developing a new drug is a function of the rate of failure in the testing process, the length of time in each phase of the testing process and the nature of the tests themselves. It has been estimated that of the new chemical entities (NCE's) entering phase I trials, only 50 percent advance to phase II, only 19 percent advance to phase III, and only 13 percent advance to NDA submission. The average testing times were estimated to be 9.1 months for phase I, 23.2 months for phase II, and 33.6 months for phase III. However, some firms submit an NDA before the completion of all phase III tests. The average testing cost for each phase is shown in Table 1. If these figures are adjusted to reflect the failure rate and discovery expenses (pre-IND expenses are roughly equivalent to post-IND expenses) and discounted to reflect the fact that they occur over time, the estimated research and development cost per marketed NCE in 1976 was \$54 million.<sup>15</sup> Obviously, this represents a considerable barrier to any but the largest drug firms.

#### **DIMINISHED PATENT LIFE**

Another impact of the increased regulation of new drug approval is the increased time to complete the testing process and to bring a drug to market, once its therapeutic efficacy is suspected. Time, per se, is a crucial factor because in order to protect their discoveries, drug firms must apply for patents on new



products long before they are approved for marketing. (Otherwise, the drug would be available to any firm desiring to complete the testing process, and the discovering firm would lose any competitive advantage gained from its original research investment.) This shortens the period of the product's commercial life during the time it is patented. The reduced time of exclusive marketing and protection from price competition for a particular chemical entity reduces its profitability and, hence, the rate of return to innovation, as well as undermining the objective of United States patent policy to stimulate technical progress. Because of this delay, a much higher profit potential is required to induce a drug firm to sponsor a new drug and carry it through the regulatory approval process. The effect of the erosion of patent protection for drugs is shown in an analysis of new chemical entities receiving NDA approval from 1966 through 1977. The average effective patent life (i.e., the time from NDA approval to patent expiration) declined from a high of 14 years in 1967 to 8.9 years in 1977, out of a total patent life of 17 years.<sup>16</sup>

As the expected rate of return to investment in pharmaceutical research and development declines, firms reduce the levels of research investment and restrict the scope of development activities. This, in turn, reduces their basic innovative output. One measure of innovative output not affected directly by the regulatory process itself is the number of NCE's first introduced into human testing by a firm in a given year, excluding compounds obtained by license arrangements or from other sources. Over the period 1963-1976, the number of self-originated NCE's first tested by humans by United States drug firms dropped from an average of 80 per year in 1963-1964 to a plateau of around 50 for 1965-1974, with a further sharp drop in 1975-1976 to approximately 28 per year. The innovational output of the United States pharmaceutical industry over this period dropped a total of 65 percent.<sup>17</sup>

### DRUG LAG

In addition to reducing the number of new drugs being developed, the regulations delay the introduction of given drugs in the United States, compared to other countries. This "drug lag" developed soon after the 1962 Drug Amendments were passed. Thus, propranolol, an important drug in the treatment of high blood pressure, was available seven years earlier in Britain than in the United States; sodium

valproate, an anti-epilepsy drug, was available eleven years earlier in France; the antiarrhythmic drug, disopyramide, was available 5 years earlier in Britain. An analysis of the patterns of introduction of the 180 new single chemical entities (NCE's) in the United States, compared with Great Britain, in the period 1962 to 1971, showed that of those drugs that were mutually available in both the United States and Britain by the end of 1971 (82 in number), 14 were introduced into both countries in the same year, 43 were introduced into Britain first with a mean lead time of 2.8 years; and 25 were introduced first in the United States with a mean lead time of 2.4 years. Multiplying these numbers to obtain the number of drug years of prior availability for mutually available entries, Britain leads with 120, as compared to 60 for the United States, a difference of 100 percent. The remaining 98 drugs were available in only one of the two countries over this period. Seventy-seven drugs were available exclusively in Britain for an average of 3.3 years each, or 256 drug years; for the United States, 21 drugs were exclusively available for 3.2 years each, or 68 drug years. The British lead for exclusively available drugs at the end of 1971 was nearly 400 percent. Introductions in the cardiovascular, diuretic, respiratory and gastrointestinal areas were almost exclusively British, while roughly equal activity was observed in cancer chemotherapy.

An update of this study for the 1972-1976 period showed that a total of 82 new drugs appeared in the 5 years; 24 became mutually available, while 58 became exclusively available. The differences in drug availability between the United States and Great Britain continued or tended to increase. Of the mutually available drugs, 2.4 times as many were available first in Britain; of the exclusively available drugs, 2.6 times as many became exclusively available in Britain. The lag was nearly eliminated in the anti-infective and respiratory fields, but it continued or increased in the cardiovascular, peptic ulcer and epilepsy fields.<sup>18</sup>

An update for 1977-1979 shows that the gap continues, with about four times as many drugs being exclusively introduced into Britain. This lag also extends to other European countries. Merely counting the availability of drugs tends to understate the lag because the United States imposes the most specific and restrictive labeling of all the major drug developing countries. Hence, drugs are available in other countries for a much wider range of uses.

(Continued on page 223)

<sup>16</sup>Wardell, "Statement at Hearings on the Food and Drug Administration's New Drug Approval Process," in *Oversight Hearings*, op. cit., pp. 51-78.

<sup>17</sup>Ibid.

<sup>18</sup>Wardell, "Introduction of New Therapeutic Drugs in the United States and Great Britain: An International Comparison," *Clinical Pharmacology and Therapeutics*, vol. 14, no. 5 (September-October, 1973), pp. 773-790.

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**Mark C. Hornbrook** is Senior Research Manager, Division of Intramural Research, National Center for Health Services Research, and the author of many publications and papers about the pharmaceutical industry and health care and economics in the United States.

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*"The rationale for regulation—to the degree it exists at all—is that scientific decision-making may improve on market decisions. . . . [But] simply put, regulation is at best a blunt and imperfect tool, and is often counterproductive."*

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## Consumer Product Safety

BY BARRY R. WEINGAST

*Assistant Professor of Economics, Washington University*

**T**WO trends in federal regulation to protect consumers over the past decade are apparent. First, regulatory control of market transactions plays an increasingly important role in our society. With the passage of a wide range of new laws, an enormous number of activities and products have come under the federal regulatory umbrella. Notable examples include automobile safety, which comes under the jurisdiction and control of the National Highway Transportation Safety Administration (NHTSA); occupational safety and health, under the control of the Occupational Safety and Health Administration (OSHA); and consumer product safety, now the domain of the Consumer Product Safety Commission (CPSC).

Moreover, accidents involving an airline crash and nuclear power that recently captured the attention of the entire country have been followed by calls for increased regulation in these areas. Older safety-related agencies include the Federal Aviation Administration (FAA), controlling air safety, the Nuclear Regulatory Commission (NRC), regulating nuclear safety, and the Food and Drug Administration (FDA), with jurisdiction over food and drugs.

Simultaneously, a second trend, as yet less significant in its impact, focuses on the costs imposed by regulation. California's Proposition 13 and the recent deregulation of airlines from the control of the Civil Aeronautics Board are visible examples of this countertrend. Supporters represent a wide range of interests, including those ideologically opposed to government intervention, those who prefer significantly lower taxes (and hence lower levels of public activity), and those who have become convinced that government bureaucracies often create more problems than they solve, independent of their social mandate. The conflicting nature of these trends affords an excellent opportunity to examine the underlying rationale for government intervention in the economy as well as the claims that inefficiency follows regulation.

In order to demonstrate the need for regulation, two premises must be considered: first, that private markets fail to provide an adequate level of safety; and second, that government controls through regulation are likely to realize potential gains in safety. A crucial element in the evaluation of any regulatory arena is an understanding of the issues underlying the rationale for regulation. Before judging the success or failure of an agency, we need to specify what problems, if any, an agency might in principle address.

Safety, as used to describe a consumer product or a work place, denotes the presence of some desirable quality. In particular, labeling a product unsafe indicates that it fails to perform adequately according to some criterion. However, despite the recent concern over the hazards associated with consumer products, analyses typically lack a satisfactory and concrete notion of safety or unreasonable risk. It seems obvious that addressing the major public policy issues involving consumer safety—whether through the assignment of liability or through the regulation of minimum standards—requires an operational definition of safety.

In the common parlance as well as in many academic and public policy discussions, safety refers to the absence of hazards or risk, terms often used synonymously.<sup>1</sup> A particular brand or product model is safer than another, according to this view, if it is associated with fewer accidents. Some scholars holding this view even propose some standard of reasonable risk based solely on the frequency of accidents.<sup>2</sup>

If the concept of safety is to have any economic content, it must reflect some standard of adequate market performance. This necessitates a general framework for characterizing and comparing market performance under various forms of market control, evaluating the cause of inadequate performance. Safety takes on a concrete meaning only when safety standards are based on the underlying issue that determines market performance.

In order to address this issue, we need to make a distinction between risk and uncertainty. The former corresponds to a situation in which the nature and consequences associated with a given product or activity are known by those undertaking these actions. As long as the probable consequences are known, the

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<sup>1</sup>See, for example, Peter Barton Hutt, "Unresolved Issues in the Conflict Between Individual Freedom and Government Control of Food Safety," *Food Drug and Cosmetic Law Journal*, vol. 33 (1978), pp. 558-589, and William W. Lowrance, *Of Acceptable Risk* (Los Altos: Kaufman, 1976).

<sup>2</sup>Hutt, *op cit*.

situation is described by risk. Uncertainty, on the other hand, refers to a situation in which the full consequences are not known. In the absence of this information, those undertaking the activity or consuming the product do not knowingly bear the risks involved. The information available to the decision maker is the key distinction between risk and uncertainty.

Contrasting the market for kitchen knives with the market for baby cribs illustrates this distinction. In the first example, the risk associated with using knives is that the user may accidentally slice his fingers. Nevertheless, many consumers are observed to bear this risk willingly by using knives. They prefer the combination of product use with risk to no use and no risk. In the second example, however, the risk associated with product use has not been well known. Until the National Commission on Product Safety dramatized this example, nearly 100 babies choked to death each year by sliding through the slats of cribs. This frequency was so low that no two were ever brought to the same emergency room. Indeed, every occurrence was considered a fluke, until the stable but low frequency throughout the entire population was discovered.<sup>3</sup> The example of knives illustrates a product characterized by risk. The second illustrates uncertainty.

To see why this distinction is crucial, consider the market outcomes for the case of risk. When consumers knowingly bear the various risks, the market performs adequately. Because consumers know the relationship between various products and their associated hazards, individual decision makers force down the price of more hazardous alternatives, whether the situation involves workers choosing alternative sources of employment or consumers considering alternative products. Any risk left in the market reflects individual tradeoffs between increasing quality and higher prices. Even if less hazardous alternatives are avail-

able or technologically possible, their lack of provision reflects a lack of demand for the safety-price combination, not some underlying flaw in the market.

Roland McKean sums up the view underlying this model.<sup>4</sup>

[When] . . . the costs of hiring producers to make safer products and issue warnings and instructions are relatively low, . . . the market is a mechanism through which consumers are able to bid for safer products, instructions, and so on. . . . [As accidents] occur to thousands of customers, they turn to rival products or producers—unless upon reflection they prefer the lower price plus that risk to higher prices with reduced risks; and producers find it profitable to make a larger percentage of their products relatively safe. . . . Hence, while disappointments and injuries never cease, users are able, in the aggregate, to register their preferences by turning to competitors and bidding more for the goods that they prefer.<sup>5</sup>

In contrast to these felicitous conclusions in the case of risk, uncertainty presents a different set of problems. Here, because consumers do not knowingly bear the risk, market performance differs significantly. Since consumers lack full information about the various hazards associated with a given activity or product, their individual choices in the market are not likely to provide the appropriate incentives for producers to provide optimal levels of risk reduction. For example, certain categories of low probability events may go undetected. A firm that manufactures products with lower levels of accidents will generally be at a competitive disadvantage to other firms because of the generally higher costs. The lack of consumer information may inhibit the firm from capturing the market gains associated with improved quality.<sup>6</sup>

While markets characterized by risk allow for the optimal operation of unregulated markets, the systematic lack of information about certain events suggests the existence of potential gains in markets characterized by uncertainty. Indeed, the proponents of models of markets under risk explicitly recognize that their conclusions require some mechanism whereby consumers learn the actual frequency of accidents. In markets where purchases are frequent, individual estimates of the relative probability of various events are likely to match actual events. When the product is purchased infrequently and where the probability of an accident is remote, information regarding hazards is likely to be incomplete.

Risk alone does not constitute a safety problem, because the market may perform optimally. The problem lies in the efficiency of the information mechanism, not the presence or degree of risk. This suggests that the notion of safety should be based upon consumer information. Markets in which consumers make informed choices should be considered to have no safety problem, despite any degree of risk. On the other hand, markets in which consumers

<sup>3</sup>This example is detailed in Steven Kelman, "Regulation by the Numbers—A Report on the Consumer Product Safety Commission," *The Public Interest*, no. 36, Summer, 1974, pp. 82-102.

<sup>4</sup>For a general discussion of market performance under various circumstances, see Nina W. Cornell, Roger G. Noll, and Barry R. Weingast, "Safety Regulation," in Henry Owen and Charles L. Schultze, eds., *Setting National Priorities: The Next Ten Years* (Washington, D.C.: Brookings, 1976). For discussions of this view in particular, see Roland N. McKean, "Products Liability: Implications of Some Changing Property Rights," *Quarterly Journal of Economics*, vol. 84 (1970), pp. 611-26, and Walter Y. Oi, "The Economics of Product Safety," *Bell Journal of Economics*, vol. 4 (1973), pp. 3-28.

<sup>5</sup>McKean, *op. cit.*

<sup>6</sup>Brand names and reputation may play a significant role that partially alleviates these problems. While analysis of this phenomena is beyond the scope of this paper, it is fair to say that most advocates of safety regulation ignore this potentially mitigating factor.



systematically lack knowledge about underlying events constitute potential safety problems. A recent court decision provides legal precedent for this view of consumer choice. In reviewing mandatory standards for swimming pool slides set by the Consumer Product Safety Commission (CPSC) in 1978, the Circuit Court for the District of Columbia stated, "If consumers have accurate information, and still choose to incur risk, then their judgment may well be reasonable."<sup>7</sup>

Indeed, the distinction between risk and uncertainty based on consumer information demonstrates the fallacy inherent in the "reasonable risk" approach that seeks to identify safety with some level of accident frequencies. If the use of the term safety is intended to reflect a systematic inadequacy of market performance, then this view falls short. The models summarized above demonstrate that as long as consumers knowingly bear the risks of various products, the market provides an optimal diversity of product quality or risk. If some risks are labeled "unreasonable" and eliminated from the market, consumer welfare decreases, not increases.

This conclusion holds regardless of the level of accidents. High levels of accidents are consistent with optimal market performance, given full information. Indeed, the fact that the adequacy of performance depends on information suggests that safety problems tend to occur in the opposite type of market, namely, in markets where the probability of an accident is too low or the product is purchased too infrequently, to gain adequate information about the consequences.

### REGULATION IN PRACTICE

A large and growing literature on the economic and social effects of regulation studies the performance of regulatory agencies over the past 25 years.<sup>8</sup> In nearly every case, regulation has failed to improve on market performance and often hurts consumers because of

<sup>7</sup>Circuit Court for the District of Columbia, *Aqua Slide 'N Dive Corporation V. CPSC* (1978).

<sup>8</sup>For a survey of this literature, see Paul L. Joskow and Roger G. Noll, "Regulation in Theory and Practice," Social Science Working Paper, no. 213, California Institution of Technology, 1978.

<sup>9</sup>Safety regulatory agencies often assume alternative political goals, like the view that workers (consumers) have a right to a safe work place (accident-free products) and that this right is inalienable, that is, not for sale. For a critique of this view, see Richard Zeckhauser and Albert Nichol, "The Occupational Safety and Health Administration—An Overview," in *Study on Federal Regulation*, Committee on Governmental Affairs, United States Senate, Appendix to Volume VI, *Framework for Regulation* (Washington, D.C.: Government Printing Office, 1978), pp. 163-250, and Guido Calabresi, *The Cost of Accidents* (New Haven: Yale University Press, 1970).

<sup>10</sup>For further discussion of the issues underlying CPSC's and OSHA's performance, see Cornell, Noll and Weingast, *op. cit.*, and Zeckhauser and Nichol, *op. cit.*, on OSHA.

counterproductive decisions. Moreover, the political goals of many regulatory agencies may not be consistent with the public welfare.<sup>9</sup> A discussion of several safety-related agencies provides some insight into the reasons for these conclusions. The agencies of interest are CPSC, OSHA, and the FDA.<sup>10</sup>

Both CPSC and OSHA possess potentials for increases in consumer and worker welfare if they discover and publicize unfamiliar risk. Yet neither agency pursues goals that relate to their reason for existence. In the case of consumer products, one of CPSC's greatest opportunities is to discover stable, low probability but damaging events whose association with particular products remain unknown. CPSC possesses a national information collection agency with this potential.

The commission could take several actions to rectify this situation. First, it might publicize the available information (or ask the manufacturers to publicize the information in lieu of mandatory product standards). Second, it might pursue a voluntary standards development program backed by the explicit threat of mandatory standards. Third, it can develop mandatory product standards.

In practice, CPSC pursues another route altogether. Instead of focusing on uninformed risk-bearing and uncertainty, the commission establishes priorities solely on the basis of the frequency of accidents (adjusted for severity). Paradoxically, the products that typically have the highest priorities tend to be those characterized by risk rather than uncertainty. Because CPSC's priorities are set on the basis of frequency and severity rather than on a systematic investigation of whether product markets include fully informed consumers, this practice cannot lead to improved market performance. Examples include bicycles, football helmets and stairs. In each case, risk is associated with product use. While CPSC regulations may decrease the number of injuries associated with the products, they are unlikely to improve consumer welfare.

For example, the risk associated with the use of football helmets reflects the risk to children of playing tackle football. Mandatory standards for helmets are likely to increase their cost and hence decrease their use. The observed number of accidents associated with their use may then decline. However, unless CPSC can affect the rate at which children play football, fewer football players will wear helmets, and this may actually increase the number of accidents it sought to prevent. Similarly, bicycles seem the case that most nearly matches the knife example. Bicyclists willingly bear the risks of self-injury.

In addition to its inappropriate focus, CPSC's regulatory apparatus (in particular, its standard writing procedure) is so cumbersome that standards take years to develop. Given CPSC's meager budget, it has

produced less than a dozen standards since its inception in 1973. At this rate, the public gains and losses from CPSC actions remain insignificant and seriously constrain the possibility for improvement.

OSHA's performance record matches that of CPSC in terms of its impact on the public welfare. In the area of safety standards, its inspectors are notorious for concern over trivialities, like the height and placement of fire extinguishers or the proper location of coat hooks in lavatories. Moreover, there seems to be no systematic understanding of the problems relating to market performance.<sup>11</sup> If contracting parties may internalize the risks borne by workers through competitive wage offers, then one potential avenue for OSHA is the systematic collection and publication of accident frequencies associated with work place characteristics. If systematic, this information may properly supplement competitive markets and work to the benefit of workers.

A second area of potential impact is health, in which the long-term consequences of certain work environments remain uncertain. Through information collection and research, OSHA investigations might systematically uncover long-term and previously unknown hazards or might demonstrate that certain levels are safe. Once known, the situation is significantly altered and the problem may begin to be internalized. Until recently, however, the agency has not focused in this area; instead it operates in a manner inconsistent with its underlying rationale.

The case of the recent benzene standard illustrates a major dilemma of standards regulation. In 1971, industry moved to set standards for exposure to benzene at 10 parts per million (ppm) to protect consumers against non-malignant diseases. Subsequently, scientists discovered evidence that benzene may cause blood cancer. Because of limited information, however, there is no known level of safe exposure. In 1977, in concert with the Secretary of Labor, OSHA moved to increase the standard from 10 ppm to 1 ppm, arguing that 10 ppm provides some protection, 1 ppm provides more. This move occurred even though there were no demonstrable benefits of the change in standards. In contrast, Labor Department

figures put the costs of the change in the standard at \$266 million for engineering controls, plus outlays of up to \$205 million in the first year and \$34 million in each succeeding year.

This type of standard setting suffers from precisely the same flaws as the underlying market. The lack of information implies that standard levels are merely shots in the dark. The rationale for regulation—to the degree it exists at all—is that scientific decision-making may improve on market decisions. Yet the benzene decision makes it clear that actual regulatory performance also fails against this ideal.

The FDA serves as a final illustration of the counterproductive effects of safety regulation. The FDA is mandated to control the release of hazardous new drugs. This authority stems from the 1962 Kefauver Amendments to the Food, Drug and Cosmetic Act. These amendments came on the heels of the thalidomide episode, in which a drug released in European markets resulted in birth defects. This widely publicized event in part fostered the increase in control in 1962, though ironically under then current legislation the drug had not been released in this country. The single most important conclusion in scholarly literature on the effects of drug regulation is negative:<sup>12</sup> the most important effect of drug regulation is that FDA policy hinders the release of new, effective drugs, because of cumbersome and costly regulatory apparatus.<sup>13</sup> Study after study documents "drug lag" or the divergence in availability of proven new drugs in European markets and in the United States.\* Whatever the underlying flaws in the market, regulatory agencies pursue goals inconsistent with improved market performance, and their counterproductive effects decrease consumer welfare.

## CONCLUSIONS

The distinction between markets that provide adequate safety and those that do not center on the availability of consumer information. Agencies mandated to protect consumers may, in principle, contribute to the public welfare. In practice, however, agencies typically pursue goals inconsistent with their rationale for existence. Thus, despite the potential for improvement, agency decisions seem more consistent with reducing risk than promoting safety.

Public solutions are not panaceas. This fact stems from the nature of political solutions, not from a philosophical or ideological argument against government intervention. Simply put, regulation is at best a

(Continued on page 228)

\*See the article by Mark Hornbrook in this issue.

<sup>11</sup>E.g., see Walter Y. Oi, "On the Economics of Industrial Safety," *Law and Contemporary Problems*, vol. 38 (1974), pp. 669-699.

<sup>12</sup>See Sam Peltzman, "An Evaluation of Consumer Protection Legislation: 1962 Drug Amendments," *Journal of Political Economy*, vol. 81 (1973), pp. 1049-1091; William Wardell and Louis Lasagna, *Regulation and Drug Development* (Washington, D.C.: American Enterprise Institute, 1975), and David Schwartzman, *Innovation in the Pharmaceutical Industry* (Baltimore: Johns Hopkins University Press, 1976).

<sup>13</sup>Indeed, submissions for new drugs now involve an overwhelming bulk of paperwork, amounting to over two tons.

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**Barry R. Weingast** is a Research Associate at the Center for the Study of American Business at Washington University, St. Louis, Missouri. His research interests include public choice regulation and political solutions to market problems.

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*"The consumer is in the midst of a revolution precipitated and fueled by the continuing energy crisis," warns this specialist, who notes that "suddenly, man the consumer and man the producer must evaluate present and projected actions in terms of social risk."*

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# Energy and the Consumer: The Risks of Revolution

BY CHARLES N. CAWLEY

*Assistant Professor of Design and Environmental Analysis, Cornell University*

and

ERVIN J. FENYVES

*Professor of Physics and Environmental Sciences, University of Texas at Dallas*

In these closing decades of the twentieth century, the energy crisis represents a challenge to achieve an optimal balance among ill-defined risks of unknown weights and relationships.

In the past, consumer risks perceived and taken were individual; and if they were known, they were either not measured or measured with imprecision. Still today, the greatest threat to the consuming public remain personal risks like fire, automobile, or storm. The annual personal injury and property loss associated with these hazards are greater than those that would be tolerated by a high technology industry in a decade. In the last 30 years, institutional complexities related to technology, increased population densities and increasingly stringent public health criteria have made risk a political and regulatory question. The energy revolution and environmental concerns have also made risk a parameter in social decisions.

Suddenly, man the consumer and man the producer must evaluate present and projected actions in terms of social risk. In an open society, the determination of acceptable risk is properly a public issue. For optimal decisions, there must be a continuing dialogue among the public, industry, and all levels of government to insure that the best possible information is available.

The consumer is in the midst of a revolution precipitated and fueled by the continuing energy crisis. Economic traditions have been challenged. Disruptive effects have been seen not only in national and international economics and politics but in consumer life. Because of crisis, the time frame for social and technological decisions has been shortened.

With the Arab oil embargo of 1973-1974, the era of cheap fossil fuel ended. For the Western economies,

this was a severe trauma. Suddenly, man passed from a world of unlimited cheap energy into a world of increasingly scarce, expensive and uncertain energy sources. The traditional restrictions of land, labor and capital have been replaced by energy, materials and information. A challenge has been made to our institutions, to our discipline.

The United States must produce more and consume less energy. This simple, obvious solution leads to realized and unrealized complexities for the consumer and for society. It may mean a departure from traditional viewpoints and new directions for consumer activism and for regulation.

In the search for new energy supplies and their subsequent development, the marketplace has been dominant. The expectation of expanding populations and increased per capita consumption has given energy and utility companies the incentives to explore and develop. Relatively low stable rates of interest and inflation also encouraged investment. Until the oil embargo of 1973-1974, the system appeared to work. Consumers and government accepted as a "blind act of faith that the oil companies and the utilities would indefinitely continue to deliver the goods."<sup>1</sup>

Of the fossil fuels used for electrical generation, natural gas has the least environmental impact; and oil has far less than coal. With gas and oil-fired generators, it is relatively easy to respond to the daily fluctuations in load demand. Both have the additional advantage over coal in that they can use the large pipeline system for distribution. During the 1960's for economic and environmental reasons, natural gas and oil became the dominant fuels for electrical generation.<sup>2</sup> Until the embargo, fuel oil was economically attractive; natural gas has remained competitive with coal.

Major structural changes in the economy and in economic thought accompanied the abrupt end of cheap fossil fuel. Before 1973, the close relationship between the gross national product and energy con-

<sup>1</sup>S.D. Freeman, *Energy: The New Era* (New York: Random House, 1974), p. 4.

<sup>2</sup>*Ibid.*, pp 87-97.



sumption was widely used to predict future patterns.<sup>3</sup> Initially, it was feared that decreased energy consumption would lead to economic decline. But today, energy conservation of approximately 30 percent has been achieved by some industries. Similar savings are thought to be possible in the commercial and residential sectors.

The United States is criticized for its massive use of energy; no other economy consumes so much. However, on the basis of energy consumed per dollar of GNP, our economy is energy efficient.<sup>4</sup> Despite the national effort toward energy conservation and greater energy efficiency, the United States will remain a dominant energy user for several reasons. By nature, national defense is energy expensive. A large portion of industrial production is from energy intensive extractive and basic industries. The mechanization of agriculture in the past century has resulted in high productivity in an energy intensive industry. Education and research, the best paths to the future, are also important users of energy. The area of the United States is large; the population density is low; and the marketplace is national. For these reasons, the energy requirements of the transportation sector also remain high. Nonetheless, there are areas in the transportation sector in which energy savings are possible. For example, the increased cost of gasoline along with the expectation of decreased availability has and will continue to encourage people to seek housing closer to the workplace.<sup>5</sup> There are areas in which we can significantly reduce our per capita consumption of energy; but there are sectors in which savings are expected to be minimal.

During the next generation at least, energy scarcity and anticipated scarcity will be prime determinants in consumer decisions. Scarcity is a radical departure from the American experience of abundance; this will make decisions more complex when scarce buying, hoarding and market disequilibrium related to supplies of energy and capital become common.

Energy scarcity can influence regional economic development in two ways.<sup>6</sup> First, there is the price effect. If there are significant regional differences in the price of energy, business activity in areas with

more expensive energy may decrease and energy-intensive industry will seek areas with lower costs and greater availability. Second, there is the income transfer effect. As energy becomes more expensive relative to the prices of other commodities, there will be a net transfer of income toward energy-producing regions; and because income and effective buying power are growing, there will be a movement of market-oriented firms to the area. The income transfer effect will generate capital which in turn will attract industry.

If one defines revolution as a series of events that trigger abrupt social, political and economic change, then Americans are in the midst of a revolution. Revolutions are destructive to societies that are not flexible, lack imagination and have little discipline. Thus, this is the generation that is forced to embark on courses of action that involve both measured and immeasurable risks. Under these conditions, strategies to meet specified goals must be continuously reevaluated to determine whether or not the benefits to society outweigh currently perceived risks to consumers—the pragmatic approach.

Under current conditions a move toward zero risk in energy development may represent the greatest risk to society. A better understanding of the risk of any action entails delay; this means a continuing dependence upon foreign supplies of energy. Before the embargo of 1973, foreign oil purchases amounted to \$2 billion; in 1979 they were around \$60 billion. Before 1973, supplies were assured; today, disruptions in foreign supplies are assured. Uncertainties related to energy prices and supply cause unwise business decisions by industry and government, and society is the ultimate loser.

Because consumer interests are closely tied to adequate and reasonably priced energy, federal regulation and policy must encourage the rapid development and implementation of various technologies. In addition to the substantial outlay of federal monies for research and development, tax incentives should encourage business to increase research budgets. Revision of patent law to reduce the life of a patent from 17 years to 7 would provide further stimulus for innovation.<sup>7</sup> To maintain a technological advantage, business would have to fund research continuously; traditionally, implementation of a new technology has taken a generation. This lead time should be shortened substantially. Construction costs for energy projects are high; construction times are long; and neither the probability of success nor the payback period of the new technologies is known. Thus, to encourage and to allow orderly energy development, appropriate government policy would include the establishment of a large fund to finance projects at low interest rates, particularly projects with unknown risks. During the Great Depression, a similar policy

<sup>3</sup>United States Central Intelligence Agency, *The International Energy Situation: Outlook to 1985*, April, 1977, p. 4; K.E. Boulding, "The Social System and the Energy Crisis," *Science*, April 19, 1974, p. 255.

<sup>4</sup>S.H. Schurr and B.C. Netschert, *Energy in the American Economy, 1850-1975* (Baltimore: Johns Hopkins Press, 1960), pp. 13-17; F. Felix, "Where Would We Be Without Nuclear Energy?" *Energy International*, vol. 12, October, 1975, p. 23.

<sup>5</sup>Maloney and D.L. Battle, "Comeback for Cities, Woes for Suburbs," *U.S. News and World Report*, March 24, 1980, pp. 56, 58.

<sup>6</sup>S.P. Burggraf, *Energy: The New Economic Development Wildcard*, PB-282-494, NTIS, 1978, pp. 6, 7.

<sup>7</sup>R. Teller, *Energy From Heaven and Earth* (San Francisco: W.H. Freeman and Co., 1979), pp. 272-273.

provided business financing through the Reconstruction Finance Corporation.

For the present, if we are to maintain a highly technical, industrial society, coal and nuclear industries must be expanded. Both technologies have environmental risks, but the benefits to all consumers must be weighed. Ethics requires that the present should not impose too heavy a burden on the future quality of life. But failure to utilize coal and nuclear technologies would lead to basic reorganizations: away from an organized, technological society and toward one with less wealth and lower expectations and perhaps without the capital or the technological expertise needed to develop new paths.

Until the recent past, nature repaired man's environmental damage. Now pollution from the super-exponential rise in world population during the twentieth century is too massive for natural repair. In today's heavily populated and highly technological world, society itself must limit damage and seek the means to speed environmental repair. Because the time scale for environmental repair processes must be shortened, regulation and government sponsored research into the environmental and public health consequences of resource development are needed. In the quest for energy independence, research and regulation become society's responsibility.

For the United States, coal is attractive because it is abundant, and deposits are spread across the continent. Coal is extracted from either surface (strip) or underground mines. Strip mining disturbs large areas and may produce acid mine drainage and silt runoff. The visual effects of strip mining are also obvious—a barren, plundered land. The environmental problems associated with underground mining are mine drainage and subsidence, both of which degrade water quality.<sup>8</sup> While the environmental impact of underground mining is less apparent, this is a hazardous occupation, with a high rate of lost-time injuries, fatalities and disease. Current regulations require that the overburden be replaced and that natural vegetation be restored. Initially, revegetation can be accomplished only by means of management and sus-

tained inputs of water and fertilizer. The rehabilitation of strip mines in the west with low rainfall or high evapotranspiration is more difficult, but it is not impossible.<sup>9</sup>

### THE "DIRTY SOLUTION"

The use of coal for electrical generation has been called the "dirty solution." Air pollutants produced by combustion are particulates, SO<sub>2</sub>, NO<sub>x</sub>, CO<sub>2</sub>, CO, polycyclic aromatic hydrocarbons and trace metals like iron, mercury and cadmium. Through complex, atmospheric chemical reactions, secondary pollutants like ozone, sulfates and nitrates are produced. Both primary and secondary pollutants in combination may impair physiological processes and threaten health.<sup>10</sup>

Coal gasification and liquefaction processes are attractive for varied reasons: a pipeline system could be used for distribution; after desulfurization synthetic oil and gas could be used as replacements in natural gas and oil-fired generators; the operations would be conducted near the mines and remote from population centers. Gasification and liquefaction of coal require substantial quantities of water, and in the arid west water is scarce and valuable. Moreover, the technology poses severe health problems for the occupationally exposed and those living near the plant.<sup>11</sup> Coal is environmentally the most disruptive energy source.

For many years, the health hazard of SO<sub>2</sub> as a pollutant has been studied.<sup>12</sup> The increased use of coal for electrical generation in the past decade and the trend toward high smokestacks to disperse emissions have led to the environmental problem of acid rain,<sup>13</sup> caused largely by sulfur dioxide emissions from coal-burning power plants and industrial operations. Nitrogen oxide emissions from these and, perhaps, from automobiles also contribute. The pollutants may be borne hundreds of miles through the atmosphere by upper level winds before they are removed in precipitation as dilute acids.

Acid rains have damaged aquatic ecosystems in the northeast and grape vineyards in western New York, and have decreased the productivity of Scandinavian forests. The damage is not limited to biological systems; it is estimated that acid rain in the United States may cause \$2 billion in structural damage annually. Acid rain is an international problem related to world meteorology. One Swede claims that British and German factories are chemically bombing his country.<sup>14</sup> Eastern Canada has a similar complaint against United States industry.

This problem clearly requires the efforts of national governments, international organizations and industry. Solutions are certain to be elusive as the United States and other economies turn increasingly to coal for energy. The President has authorized \$10

<sup>8</sup>Freeman, *op. cit.*, pp. 57-62.

<sup>9</sup>Teller, *op. cit.*, p. 116.

<sup>10</sup>S.C. Morris, K.M. Novak, and L.D. Hamilton, "Health Effects," *An Assessment of National Consequences of Increased Coal Utilization*, TID-29425 (vol. 2), 1979, pp. 12-5, 12-6.

<sup>11</sup>S.C. Morris, P.D. Moskowitz, W.A. Sevia, P. Silbershtein, and L.D. Hamilton, "Coal Conversion Technologies: Some Health and Environmental Effects," *Science*, vol. 206, 1979, 659-662.

<sup>12</sup>J.R. Goldsmith and L.T. Friberg, "Effects on Human Health," in *Air Pollution*, vol. 2, ed. by A.C. Stern (New York: Academic Press, 1977), pp. 483-495.

<sup>13</sup>G.E. Likens, R.F. Wright, J.N. Galloway and T.J. Butler, "Acid Rain," *Scientific American*, October, 1979, pp. 43-51.

<sup>14</sup>"Acid From the Skies," *Time*, March 17, 1980, p. 17.

million annually for a 10-year research program. However, to retrofit an existing plant with a scrubber costs substantially more than the annual national outlay for research into acid rain. It is estimated that it would cost \$7 billion annually to halve  $\text{SO}_2$  emissions in the northeastern United States.<sup>15</sup>

## GLOBAL CLIMATE CHANGE

Civilization's continuing need for energy may be creating a more subtle, catastrophic problem—global climatic change. It is hypothesized that atmospheric carbon dioxide may act as a blanket for the infrared radiation from the earth, thereby increasing the earth's temperature. During the past century, atmospheric  $\text{CO}_2$  concentrations have increased by 40 ppm and may have contributed to a global temperature increase of  $0.2^\circ\text{K}$ .<sup>16</sup> In the combustion of fossil fuels, a major product is  $\text{CO}_2$ . Because the carbon-hydrogen ratio is much higher in coal than in natural gas or oil, more  $\text{CO}_2$  is evolved during coal burning. Thus, greater reliance on coal may accelerate the upward trend in atmospheric  $\text{CO}_2$  concentrations. This conclusion, however, is not shared by the whole scientific community.

One hypothetical scenario of increasing world temperature predicts the melting of the polar ice caps, a rise in ocean levels, and the flooding of coastal cities. The resulting climate change would affect agricultural productivity.<sup>17</sup> Nonetheless, some investigators discount the "greenhouse effect" of increasing concentrations of  $\text{CO}_2$ .<sup>17</sup> One points out that since 1940 global temperatures have been decreasing, despite increased atmospheric  $\text{CO}_2$ .<sup>18</sup> Perhaps other factors like atmospheric dust are of greater or equal importance in the global heat balance. Nonetheless, this is a question that requires careful evaluation by government and industry. If the "greenhouse effect" is operable, the climatic and territorial changes envisioned are irreversible on the time scale of man. A National Academy of Science panel reports that it is not known whether the hypothetical climate changes would occur by a gradual passage through a continuum of states or whether changes would occur in discrete

shifts from one dynamically stable state to another.<sup>19</sup> Because apparently minor changes might bring on abrupt climate changes, the discrete shifts would be dangerous.

Coal burning also generates substantial quantities of solid wastes; the volume has increased with the addition of air pollution control equipment. The physical handling and transportation of the waste (because of its quantity) is expensive. Some waste is used in road building; a great deal is added to landfills. There is some concern about the leachate entering waterways and degrading water quality.

The safety of nuclear energy, more precisely the safety of fission reactors, is an area of public confusion. In the late 1940's, Americans believed that the nuclear age would solve all problems related to energy and that a new era of unprecedented economic, social and cultural development would be achieved in the second half of the twentieth century. The 1960's and 1970's, however, brought an unexpected social and political revolt against new technology and particularly against nuclear energy. The movement was politically and emotionally motivated. Recent polls show, however, that despite the anti-nuclear movement and the accident at Three Mile Island, the majority of Americans favor nuclear energy, particularly when the alternatives are fairly presented.<sup>20</sup> A forum of the National Academy of Sciences concluded in September, 1979, that "while people appear to favor nuclear power, they are not necessarily comfortable with it."<sup>21</sup>

Consumer support for the development of nuclear power in our energy future has been strengthened by recent political and military crises in the Persian Gulf. Increasing numbers of Americans believe that nothing has a higher risk to the nation's life and security than the present, massive dependence on imported oil.

The risks of the widespread use of nuclear fission for energy generation include the proliferation of nuclear weapons, the safety of nuclear reactors, and the problems of radioactive waste disposal. Nuclear proliferation is an international problem and, to a large extent, it is independent of the domestic use of fission reactors, the implementation of fuel reprocessing technology, or the future use of breeder reactors.

(Continued on page 227)

<sup>15</sup>Ibid.

<sup>16</sup>A.D. Watt, "Placing Atmospheric  $\text{CO}_2$  in Perspective," *IEEE Spectrum*, November, 1971, p. 59.

<sup>17</sup>W. Bach, "The Potential Consequences of Increasing  $\text{CO}_2$  Levels in the Atmosphere," in J. Williams, ed., *Carbon Dioxide, Climate, and Society* (New York: Pergamon Press, 1978), pp. 152-158; G.M. Woodwell, "The Carbon Dioxide Question," *Scientific American*, January, 1978, p. 34.

<sup>18</sup>Watt, *Spectrum*, pp. 69-71.

<sup>19</sup>"NAS Panel is Concerned Over  $\text{CO}_2$  Buildup," *Physics Today*, October, 1977, p. 18.

<sup>20</sup>H.W. Lewis, "The Safety of Fission Reactors," *Scientific American*, March, 1980, p. 53.

<sup>21</sup>*Nuclear Radiation: How Dangerous Is It?* Summary of Proceedings, Academy Forum, National Academy of Sciences, September 27, 1979 (Washington, D.C.).

Charles N. Cawley has research interests in the consequences of energy technologies, particularly fission and fusion systems. He is completing the chapter, "Modelling Reaction Kinetics in Man," in Sven E. Jorgensen, ed., *Application of Ecological Models in Environmental Management* (New York: Pergamon, forthcoming). Ervin J. Fenyves, an elementary particle physicist, is the coauthor of *The Physical Principles of Nuclear Radiation Measurements* (New York: Academic Press, 1969) and is studying the safety and environmental effects of the fission reactor.



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*"The information and training needed by consumers to operate effectively in their economic interactions with producers comes both formally through education programs and informally through the information that consumers receive from various sources—salesmen, friends, advertisements, labels, consumer magazines, government agencies, businesses or consumer groups."*

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## Educating Consumers: Whose Responsibility?

BY CHARLES MONSMA

*Associate Professor of Political Science, Eastern Michigan University*

**W**HEN he was President of the United States, Gerald Ford labeled consumer education a right of every citizen and added it to President John Kennedy's list of four rights—to safety, to be informed, to choose and to be heard—as a fifth right that all citizens should enjoy as consumers.

Strong endorsements of consumer education come from business, from government and from consumer advocates. This general agreement has broken down, however, when questions have been raised about the roles which these various sectors should play in the consumer education process. What is the proper role of government in encouraging consumer education and regulating sources of consumer information? Can business be trusted to provide accurate information to consumers? To what extent must consumers be independent in educating themselves to make decisions in a knowledgeable and skillful manner?

Before analyzing these questions, consumer education should be defined. At an informal level, it might be seen as the totality of programs and informational materials that enable consumers to interact with producers in the economic system. Consumer education has evolved, however, into a formal field of study that applies the insights and approaches of a number of disciplines to the task of increasing consumer competence.<sup>1</sup> The information and training needed by consumers to operate effectively in their economic interactions with producers comes both formally through education programs and informally through the information that consumers receive from various sources—salesmen, friends, advertisements, labels, consumer magazines, government agencies, businesses or consumer groups. Consumers may be more than simply recipients of information; individually and collectively consumers influence the nature and context of consumer decisions, and should be able to affect the quality of the information which they receive. Consumer education, therefore, is both de-

fensive and offensive, teaching consumers to cope with the situation they face in the marketplace every day and enabling them to act as consumer citizens, evaluating and influencing the range of alternatives and the use of information available to them.

What is the appropriate balance among the various inputs to the process of consumer education? Most observers agree that all three participants in the triangle of consumer relationships have a role to play in consumer education. Certainly in practice, business, government and consumers are involved in educating consumers and in providing, evaluating or regulating the information which consumers receive. The consumer receives information from business, primarily but not exclusively in the form of advertising. Government contributes formal consumer education programs, often in the schools, and through other channels like publications. In addition, government provides protection to consumers through the regulation of advertising and other activities. Consumers, especially when they work collectively, may establish their own avenues of information and protection and mechanisms through which their influence can be exerted.

In consumer education, as in the overall working of the economy, a balance must be achieved. As advertising is a major informal source of information for consumers and an area in which the interaction of the three sectors illustrates their overlapping roles, it will be used to evaluate the balance of responsibilities among them.

### THE ROLE OF THE CONSUMER

Without the active participation of the learner, no transfer of knowledge or skills can occur. Each individual thus bears some ultimate responsibility for his or her education as a consumer. In addition, practical realities and the disparate goals of business, government and consumers also demand that consumers consciously accept responsibility for their own education. Individually and collectively, consumers themselves must determine what is best for a given individual or for consumers as a whole.

<sup>1</sup>Rosella Bannister and Charles Monsma, *Classification of Concepts in Consumer Education* (Ypsilanti, MI: Michigan Consumer Education Center, 1980).

Elements of the business community may at times share common concerns and directions with consumers, but their ultimately different goals mean that the perspectives and materials that emanate from the business sector are not a dependable source of information for consumers. Likewise government, which in some cases may follow a mandate to crusade on behalf of consumers, often has different goals and is exposed to influences other than those that reflect consumers interests. Given the ongoing tension between competing producer and consumer interests, government must often serve as referee, mediator or judge. In addition, the traditional balance between the business community and consumers makes it inappropriate to rest all hopes for consumer representation in government officials. Government agencies set up to regulate one or another aspect of the economy have generally been highly influenced if not taken over completely by the industries they were supposed to regulate.

Thus consumers must define their own interests and supervise their sources of education and information. At the same time, consumers are not totally independent; they are dependent in many ways on both business and government for information and protection. Consumers cannot always create their own information sources; they cannot completely control the quality of the products and services they receive, and they cannot unilaterally enact or enforce desirable legislation. They must, however, receive, evaluate and influence the information that comes to them from business and from the government. Without some form of consumer education, the individual consumer will be unable to understand or accomplish this task. There is much evidence that, even with consumer education, today's consumer is in no position to fill this role.<sup>2</sup> Given the demonstrably low levels of consumer knowledge about the law,<sup>3</sup> it has been suggested that:

The greatest need today is not for yet more laws but for effective and continuing publicity about the many good rules and regulations already on the books. When it comes to encouraging law enforcement, we'd get a lot of

bang for the buck simply by printing and distributing millions of consumer-information leaflets, so that people can see to their own rights without relying on others to do the job for them.<sup>4</sup>

The continuing evidence that consumers do not use available information leads observers to question the viability of consumer protection predicated on the knowledge of individual consumers. Expectations of competence must be buttressed by collective action that consumers can take to protect one another. Many of the ill effects of individual deficiencies, whatever their cause, may be negated by the results of organized consumer activity. Most current consumer education materials speak of personal vigilance as the ultimate weapon, but they generally ignore the useful strategies that may succeed through collective means.

Local community groups may evaluate merchants and services and may be the only source of information not controlled by the sellers. On occasion, such a group may be able to curtail certain deceptive practices on behalf of all consumers, whether or not they are aware of the activities of the group. Local advocacy activity is very difficult, often not effective and sometimes inappropriate, but it may be the best available help. At another level, the formation of self-help groups by consumers who share particular characteristics or needs may provide an effective link with political decision-makers or the suppliers of goods and services.<sup>5</sup>

### NATIONAL CONSUMER GROUPS

National consumer groups also provide information and protection to consumers. Those most directly and fully involved in consumer education are the product-testing organizations, of which Consumers Union is foremost. While engaged in a wide range of education and advocacy activities, the product-testing function of the organization disseminating the results through *Consumer Reports* magazine remains primary. No product-testing organization in any other country has a larger budget than Consumers Union nor more subscribers than *Consumer Reports*; yet the organization and publication play a smaller role in the United States than their counterparts in many West European countries. Larger relative circulation and higher relative levels of funding, often supported by government subsidies, characterize the European organizations.

While government subsidies have been proposed in this country, the concept has not been seriously considered. Under the Freedom of Information Act, however, consumers have begun to receive the results of government product testing, until recently unavailable to the public. Even those deeply involved in the consumer movement realize that the range and effect of consumer product testing have been limited in the United States and that "new techniques are

<sup>2</sup>Frederick W. Langrehr and J. Barry Mason, "The Development and Implementation of the Concept of Consumer Education," *The Journal of Consumer Affairs*, vol. 11. (Winter, 1977), pp. 73-77, cites seven studies which found no differences in consumer competencies between those who have had a consumer education course and those who have not.

<sup>3</sup>William H. Cunningham and Isabella C.M. Cunningham, "Consumer Protection: More Information or More Regulation?" in David A. Aaker and George S. Day, eds., *Consumerism: Search for the Consumer Interest*, 3d. ed. (New York: The Free Press, 1978), pp. 161-167.

<sup>4</sup>Jane Bryant Quinn, *The Ann Arbor News*, October 2, 1978 (syndicated column).

<sup>5</sup>See Alan Gartner and Frank Riessman, *Self-Help in the Human Services* (San Francisco: Jossey-Bass, 1977).

needed for extending consumer testing to the service of the whole community."<sup>6</sup>

Product testing epitomizes the role of organized private consumer activity in this country. Much excellent and devoted effort has been made, but the resources and the impact have been minuscule compared to the impact of other, often competing, information sources like advertising. As described by E. Scott Maynes:

Information-persuasion efforts are almost completely controlled by sellers rather than consumers. In 1970, seller-controlled expenditures totaled \$67 billion in contrast to the \$13 million expended by the two consumer product testing organizations. To put this in perspective, the seller-controlled expenditures exceeded the consumer-controlled expenditures by a ratio of 5,154 to 1!<sup>7</sup>

One potential public policy proposal suggested by Maynes is to shift some resources from sellers to a consumer-controlled information organization by means of a tax. This proposal relates to an "assessment that strongly supported the view that the information supplied by consumer controlled organizations is usually accurate and relatively complete."<sup>8</sup>

The consumer role in the consumer education process is perhaps best characterized by the untapped potential that exists at both individual and group levels. Cooperation among consumers, business and government is possible, but only when the independent perspective and organizational integrity of consumers can remain intact. Terms like "consumer interest," "public interest" and "special interest" must be used carefully, recognizing that the best interests of consumers may be neither agreed upon nor uniform. At the same time, the search for appropriate consumer perspectives must not be clouded by an unwillingness to acknowledge that consumers legitimately differ with producers.

### THE ROLE OF BUSINESS

The sponsorship of consumer education programs by business has taken various forms. Some programs, like the Consumer Affairs Forum held annually at the headquarters of the J.C. Penney Company, have been conducted by a specific business. Other programs like the wide network of college credit courses supported in part by Montgomery Ward and Company, have been partially sponsored by business in conjunction

with colleges and universities. More widespread and more controversial is the practice of providing materials for use in classrooms. This long-standing practice was questioned as long ago as 1929 by a committee of the National Education Association. The practice has prospered and expanded; but it came under renewed criticism in 1979 with the publication of *Hucksters in the Classroom*, by Sheila Harty.<sup>9</sup>

The physical quality of the materials furnished by business is generally excellent and the materials often usable in classroom situations, with supporting visuals and teacher aids included. While many teachers use business materials without any reservations, others worry about the use of captive school audiences as a medium for advertising and about the possibility of bias in the material, especially on controversial issues. While the presentation of differing points of view should be encouraged in classroom settings and controversial issues should not be avoided, balance or recognition of differing points of view is important. Teachers and students are especially vulnerable to materials clothed in the neutral garb of educational materials. Certainly visibility of sponsorship is legitimate, because it signals the potential bias view of the material, although if overdone it may turn into overt advertising.

The question of objectivity is tricky; what is "truth" to one person is "obvious bias" to another. The best defense is a recognition of the potential factual or ideological pitfalls in any materials, combined with enough expertise on the part of teachers to enable them to walk the fine line between advocacy of established knowledge and recognition of varying perspectives. The publication and dissemination of guidelines for teachers to use in evaluating materials is helpful. The assumption behind most guidelines, i.e., that teachers are able to judge the bias or objectivity of materials, is perhaps unrealistic. Especially in complex fields like nuclear power, nutrition and economics, teachers are often at the mercy of whatever materials are available. The next line of defense is to ask groups of teachers, consumer advocates, representatives of business, or other experts to publish evaluations of specific materials that are meant for classroom use. Before long, evaluations of evaluations may be appearing in fast sequence. This is better, however, than allowing questionable material to speak for itself.

A particular vulnerability to business-sponsored material results from its availability at a time when public resources for teaching materials are scarce. The situation has not changed since 1929, when this statement was made:

The difficulty of this problem will be lessened when all schools are supplied with adequate funds so that no school will be compelled to rely on gifts and donations from the outside.<sup>10</sup>

<sup>6</sup>Colston E. Warne, "Consumer Action Programs of the Consumers Union of the United States," in Aaker and Day, *op. cit.*, p. 160.

<sup>7</sup>E. Scott Maynes, *Decision-Making for Consumers* (New York: Macmillan, 1976), p. 323.

<sup>8</sup>*Ibid.*

<sup>9</sup>Sheila Harty, *Hucksters in the Classroom* (Washington, D.C.: Center for Study of Responsive Law, 1979).

<sup>10</sup>Quoted in *ibid.*, p. 99.



Dustin Wilson, the Director of the Office of Consumers' Education in the Department of Education, has called for the evaluation of all materials and the development of alternative materials:

Certainly administrative guidelines . . . should be developed to protect both teachers and students from self-serving propaganda. But beyond that, educational personnel are in need of a vehicle which would provide access to those materials being produced by responsible, professional consumer educators.<sup>11</sup>

## ADVERTISING

The line between education and advertising may be hard to define in materials prepared by business for classroom use. The advertising process itself, however, makes little or no pretense of being educational or unbiased and provides the main source of the information that consumers receive from business. Information may be transmitted through an educational process and through advertising; the two may on occasion overlap in practice, but the theoretical distinction between them is important.

Consumer education by definition has the welfare of the consumer as its ultimate goal, whereas the main purpose of advertising is to stimulate in consumers a desire to buy a certain product or patronize a particular business. Such an action may or may not be in the best interest of the consumers who come into contact with the advertisement. The seller controls the availability, content and emphasis of advertisements, and the interests of the seller are primary. While the informational needs of consumers may at times be congruent with the goals of the seller, the consumer's needs are incidental to the advertising process.

At the same time, consumers are very dependent on advertising as a source of information. It is hard to imagine functioning effectively as a consumer in the United States if one were deprived of commercial advertising.

Nonetheless, advertising remains a vital source of information. Prohibitions on the advertising of fees charged by lawyers and doctors and on advertising the prices of optical and prescription goods noticeably raised price levels. Such advertising prohibitions have been successfully challenged in the courts by consumer groups. The absence of advertising would not

solve current informational deficiencies. Major alternative sources of information from government or private consumer groups are not now a viable substitute. Product testing magazines reach relatively few people, and local consumer agencies and groups have small budgets and limited organizational or political strength. Alternative information sources like television and newspapers provide relatively little information, and where information has been made available to consumers under information disclosure requirements, the effects on consumers have been modest.<sup>12</sup>

The current information system, with commercial advertising playing a central role, is likely to remain. Advertising has been justified as a boon to consumers, saving them money in production costs and stimulating the overall economy,<sup>13</sup> and it has been criticized as a deterrent to the free market ideal of consumer sovereignty based on rational choices and full information.<sup>14</sup> Whichever description is closest to the truth, the practical impact of the role of advertising on consumers is to leave them with little control over a major information source on which they base many consumer decisions. Of major concern to consumers, therefore, are the reliability and accuracy of advertising content. Although advertising in its current form does not provide full information, can consumers be protected from inaccurate and deceptive appeals? What regulatory mechanisms are most appropriate to this goal?

The primary argument of the business community is that self-regulation is a viable course and that mechanisms have been developed to implement self-regulation. Various advertising codes are widely subscribed to, but they have been cited as "virtuous and obvious, but not very effective."<sup>15</sup> An elaborate mechanism for reviewing complaints about deceptive advertising has been set up in the advertising industry, and its reports show cooperation from those who have been asked to adjust their advertising practices.<sup>16</sup> The vigilance of the self-regulatory groups is called into question, however, by statements like the following from their educational materials:

Can advertising be believed and trusted? Yes. Manufacturers who use advertising to sell their brand products are creating "goodwill" on the part of their consuming public. False or deceptive advertising, particularly for products that fail to live up to advertised

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**Charles Monsma** is a consultant to the Michigan Consumer Education Center. He has developed many teaching materials related to consumer law and is currently serving as Program Associate to the Consumer Education Development Program, a national study funded by the United States Office of Consumers' Education.

<sup>11</sup>Quoted in *ibid.*, p. 160.

<sup>12</sup>See, for example, Aaker and Day, *op. cit.*, pp. 128-151.

<sup>13</sup>American Advertising Federation, *Questions and Answers About Advertising* (Washington, D.C., 1974), brochure.

<sup>14</sup>Zena Cook, Allen R. Ferguson, and Garth Trenkl, *Impact of Advertising: Implications for Consumer Education* (Washington, D.C.: U.S. Office of Consumers' Education, n.d.), pp. 2ff.

<sup>15</sup>Leland J. Gordon and Stewart M. Lee, *Economics for Consumers*, 7th ed. (New York: D. Van Nostrand, 1977), p. 219.

<sup>16</sup>For a description of the complaint handling system, see *ibid.*, pp. 220-221.

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*"New problems and new standards for evaluating the food system are emerging. We expect the food system to help meet national health goals, aid in world diplomacy, contribute to wise resource use and help meet other domestic and international needs. Unfortunately, the current structure of the federal government does not deal adequately with these new expectations and the conflicts that surround them."*

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## The Consumer and Food

BY CAROL TUCKER FOREMAN

*Assistant Secretary of Agriculture for Food and Consumer Services*

**F**OOD regulators face new challenges in today's changing world. The growing complexity of the food industry has made regulation more difficult. Products travel much further and much faster than before. Thousands of additives and other substances are used at various stages of production from feeding animals to packaging and transporting products. More and more products are processed following complex formulas.

The role of the federal government in protecting consumers from unwholesome food has been firmly established for many decades. The Department of Agriculture's involvement in food regulation dates to 1890 when the Meat Inspection Act was enacted, primarily in response to concerns in foreign countries about the safety of United States meat being exported. In 1907, the Federal Meat Inspection Act was passed, extending requirements for inspection to domestic meat products. The 1907 Act was a response to the appalling conditions in United States stockyards and packinghouses exposed in Upton Sinclair's book *The Jungle* and to the public alarm over the chemicals that were being added to meat to give it a fresh appearance.

The Department of Agriculture's Food Safety and Quality Service shares responsibility with several other agencies to assure consumers that the food they eat is safe to eat and is properly labeled and advertised fairly. It enforces the Federal Meat Inspection Act and the Poultry Products Inspection Act. All meat and poultry sold in interstate or foreign commerce must be inspected by federal inspectors to assure that products are safe, wholesome and accurately labeled. All poultry and livestock are inspected both before and after slaughter and no slaughtering operation or processing plant can operate without USDA inspection. Some states operate their own inspection programs for meat and poultry plants selling products intrastate, but these state programs must be "at least equal to" the federal program.

The Food Safety and Quality Service (FSQS) also helps protect consumers through its voluntary grading program. This program assures consumers of the

quality of many of the foods they buy, including meat, poultry, eggs, certain dairy products (like butter, sour cream and cottage cheese), and fruits and vegetables. The grading program is offered to producers on a fee-for-service basis. Approximately 55 percent of the federally inspected beef in this country is graded by FSQS, as is 75 percent of the inspected chickens and 95 percent of the turkeys. At present, there are some 9,000 federal inspectors and veterinarians working in approximately 7,000 meat and poultry slaughtering and processing plants throughout the country.

The Food and Drug Administration (FDA) is located in the United States Department of Health, Education, and Welfare (soon to be called the Department of Health and Human Services). It is responsible for the inspection of all foods except meat, poultry and fish. FDA administers the nation's basic food and drug law, the Federal Food, Drug and Cosmetic Act, and is responsible for testing the safety of animal drugs and for setting "tolerance" levels for drug residues in food. The agency evaluates and approves the use of all food additives and prescribes the conditions under which they may be used. It also promotes sanitation in public eating places and in interstate travel facilities.

FDA periodically inspects processing and storage plants to ensure that they are sanitary; its inspectors also check the wholesomeness of ingredients and finished food products, as well as the labeling of these products. The agency is very active in the prevention of food-borne disease by working to eliminate the source and removing contaminated food from the marketplace.

National Marine Fisheries Service, an "arm" of the National Oceanic and Atmospheric Administration in the United States Department of Commerce, offers inspection for all processed fishery products—fresh, frozen, canned and cured. Federal inspectors check the plants, procedures and products of firms that use and pay for these voluntary services.

The fish inspection program consists of two parts: inspection, to make certain that products are safe, pure and properly labeled and that products are

processed in plants which meet hygienic standards; and grading to determine the quality level of certain fish products.

Two other independent agencies play roles in food regulation. The Federal Trade Commission (FTC) is responsible for protecting the public from false or misleading advertising. The Environmental Protection Agency (EPA) is responsible for testing the safety of pesticides and toxic substances to which food products might be exposed and for setting the tolerance levels of residues from these substances.

Obviously, these overlapping jurisdictions can sometimes create problems in effective food regulation, and the question has been raised as to why so many agencies are involved. Unfortunately, this is an easy question to ask but a difficult one to answer. Part of the reason for the multitude of federal agencies lies in the mandates of Congress over the years. The meat and poultry inspection acts, the Federal Food, Drug and Cosmetic Act and other laws have authorized different agencies to carry out various food safety activities. And the needs of our society have grown so rapidly in recent years that it has become necessary for the government to handle the entire food regulation issue from many fronts.

New problems and new standards for evaluating the food system are emerging. We expect the food system to help meet national health goals, aid in world diplomacy, contribute to wise resource use and help meet other domestic and international needs. Unfortunately, the current structure of the federal government does not deal adequately with these new expectations and the conflicts that surround them.

The conflicts within the food system are many—farm prices versus retail prices; processing costs versus food safety; product promotion versus nutrition information; resource use versus resource preservation, and food aid and foreign trade versus domestic supplies and costs. Each of these conflicts must be reckoned with in forging a national food policy, and the efforts of many agencies are involved. Unfortunately, Cabinet and independent agencies tend to be organized around clienteles that “debate” one side of a food issue or another. This impedes objective policymaking and coordination of food issues.

The Department of Agriculture is the lead agency for developing a food and nutrition policy. But because it is often viewed as representing producers, it has difficulty in forging policies that will be accepted as workable compromises among conflicting interests, particularly those involving consumers and issues of concern to consumers, including food safety and additives.

USDA has many food and nutrition programs, and so does the Department of Health, Education and Welfare. But both departments have difficulty in representing the consumer in developing a food and

nutrition policy. It is important to develop an environment in which we can coordinate a food and nutrition policy and modify it over time to keep it relevant. The present organizational structure does not coordinate the hard scientific facts, economics and politics of food issues in a way that leads to effective policy formulation.

## GOVERNMENT COORDINATION

Fortunately, initiatives are under way to coordinate some of the work of the various food regulatory agencies in the federal government. The most significant recent effort began in December, 1979, when FDA, USDA, and the Federal Trade Commission (FTC) announced a major program to improve food labeling. Because FDA, USDA and FTC are responsible for different areas of food labeling and advertising, they have more or less gone their own separate ways in the past. The three agencies began examining the labeling problem in 1978 and decided that if consumers were to be fully served, regulations should be as consistent and uniform as possible.

Coordinated labeling reforms are needed to meet the tremendous changes in food processing and distribution that have occurred since passage of the last significant food labeling law in 1938. The proposed reforms dovetail with the increased demands of consumers to know more about what goes into their foods. The plan will require more complete information about ingredients on food labels, including quantities of certain ingredients; nutrition labeling for more foods; clear labeling terms and concepts; open dating for some foods; and greater controls on food fortification. The effort is part of the President's overall goal to assure that regulations are coordinated among all responsible agencies.

In developing the labeling reform plan, the three agencies worked together in another significant effort. That was—to borrow a phrase from the telephone company—to “reach out and touch someone.” Government, we have slowly discovered, cannot operate in a vacuum; it must reach out to consumers, trade groups, industry and others to discover their needs.

This program is an important element in the food labeling effort. If agencies are going to write regulations about labels, it is important to find out what the people who read those labels want. In a joint effort, USDA, FDA and FTC held public hearings in five cities. Written comments were invited, hundreds of consumers testified, and over 9,000 people put their thoughts in writing. These thoughts became a vital part of the food labeling plan proposed in December, 1979.

In another effort to cooperate with other agencies, in 1979 FSQS joined an interagency group of regulatory agencies to achieve consistent policies for dealing with consumer health and safety problems. The



group—called the Interagency Regulatory Liaison Group (IRLG)—includes FSQS, the Consumer Product Safety Commission, EPA, FDA and the Occupational Safety and Health Administration. These agencies have combined forces to share information and research, develop joint inspection programs, issue complementary standards and, most important, develop a uniform policy on scientific testing and assessing safety data.

One of the most significant IRLG actions thus far is in the area of cancer risk assessment. The IRLG agencies have assembled scientific experts to develop a uniform policy to identify potential carcinogens and estimate their risks. A rather extensive document on the subject has been developed and is under review by the scientific community.

### FOOD ADDITIVE REGULATION

In part because of the increased production of prepared, processed and convenience foods, food additives are becoming more controversial, and consumers, scientists and others have raised questions about the necessity and safety of these substances. Food additives are strictly regulated by law to assure consumers that they are safe and that labels carry the names of all the additives used in a product. Enforcement of these laws requires the coordinated effort of FSQS and FDA. All additives are initially evaluated for safety by the FDA. When an additive is proposed for use in meat and poultry products, it must also be evaluated by FSQS because of the unique characteristics of meat and poultry. It is approved for use only in the smallest amount necessary to perform its intended function, and its approval is never permanent. FDA and FSQS continually review the safety of all approved additives to determine if these approvals should be modified or withdrawn.

Additives are as varied as the foods in which they are used. Salt, sugar, corn syrup, vitamins and minerals are just a few of the more common additives. Others are not so well known but serve equally important functions. There are, to name a few, antioxidants to prevent the loss of color and flavor; preservatives and curing agents to prevent food spoilage; binders and extenders to bind together ingredients in processed products like hot dogs; and enzymes to tenderize meat.

Then there are additives that are important but extremely controversial. The most famous of these is nitrite—more specifically sodium nitrite and sodium nitrate—which enhances the color and flavor of foods and is used to prevent the growth of botulism, an often fatal food poisoning. The use of nitrite to preserve meats, fish and poultry has been a source of growing concern among the scientific community and the public, because of scientific evidence that has mounted steadily since the early 1960's linking its use

to cancer. Active research to find a substitute for nitrite continues, but no substitute has yet been found that is as effective against botulism.

In the meantime, FSQS is taking precautions to assure that cured meats do not contain carcinogenic nitrosamines—compounds formed when nitrite combines with other chemicals called amines. In 1978, the agency issued a regulation requiring processors to reduce the levels of sodium nitrite to cure bacon so that fried bacon did not contain confirmable levels of nitrosamines. To monitor compliance with the regulation, each week FSQS tests samples of bacon from statistically selected plants.

If a plant fails the preliminary test of routine monitoring, it may change its production procedures to try to reduce nitrosamines to acceptable levels. Bacon found to contain unacceptable levels of nitrosamines will not be sold to consumers unless individual lots are found to be acceptable on a lot-by-lot basis.

### RESIDUE DETECTION AND CONTROL

Residues in food—drugs and chemicals—are also of major concern to consumers and have made recent national headlines. The presence of residues in food represents a special problem; because they cannot be seen, smelled or tasted, they are difficult to detect. However, high doses of chemical residues have been linked to serious health problems like cancer, birth defects and allergic reactions.

To help prevent the marketing of animals containing illegal drug and chemical residues, FSQS conducts the National Residue Program. FSQS inspectors check livestock and poultry for abnormalities both before and after slaughter. Since chemicals and drugs seldom cause outward symptoms, analysis of sample tissues is conducted in FSQS laboratories. Under the residue program, statistically selected tissue samples are analyzed for many different types of chemicals and drugs. Some of the drugs and chemicals tested have received widespread attention, including polychlorinated biphenyl (PCB) and diethylstilbestrol (DES). Concerted efforts by FSQS and FDA have resulted in the banning of DES as an animal growth promotant and have sharply reduced the likelihood that leaky transformers or similar equipment containing PCB's will contaminate feed or otherwise enter into food-marketing channels.

Sulfa drugs and other antibiotics have also received attention. A high rate of sulfa residue violations, as high as 15 percent, have been reported in swine-producing areas. FSQS, FDA, trade and producer groups have cooperated in a massive education and research program to fight the problem, and a recently completed 18-month special program has significantly reduced the levels of sulfa found in swine going to market. The rate is now averaging about five percent.

A similar cooperative effort has helped to reduce antibiotic residues in cull dairy cows. FSQS has developed a new test—called “STOP” for “Swab-Test-on-Premises”—which allows inspectors to detect antibiotic residues in slaughtered animals within hours, before a carcass normally leaves the slaughterhouse. (Previous testing took 7-14 days to complete.) Because the test is so simple and fast, more than 10 times the former number of questionable carcasses can be tested.

Chemical contamination of food through accidents or industrial pollution is also attracting nationwide attention. Animal feeds in Michigan contaminated by polybrominated biphenyls (PBB's), the Hudson River contamination by PCB's, and the James River contamination by Kepone drew the attention of environmentalists, consumer groups and the media.

Recently, Congress's Office of Technology Assessment (OTA) studied 243 food contamination incidents occurring in every region of the country and involving all categories of food. The survey examined the adequacy of current federal and state efforts to prevent the environmental contamination of food. In particular, OTA evaluated the effectiveness of federal and state monitoring systems in detecting contamination incidents before they reach crisis proportions and federal efforts to regulate contaminations. The survey pinpointed the health and economic impacts of contamination and the problems of regulating environmental contaminants. Specifically, the survey concluded that management of food contamination is hindered by the complexity of the food system, the rapidity with which food is moved through the system, and the failure of state and federal agencies to coordinate their information-gathering activities.

FSQS became deeply involved in a major food contamination problem, when PCB's from a damaged transformer contaminated animal fat at a packing plant in Montana. The plant used the contaminated fat to produce meat and bone meal that was sold to feed manufacturers and farmers in at least 10 states, polluting poultry, eggs, pork products and processed foods. Contaminated food was found in 17 states, and hundreds of thousands of pounds of food products were seized or destroyed. The incident involved a contamination of our environment that might have injured thousands of people (if they had consumed the contaminated products), and it resulted in considerable financial loss to farmers and the processing industry.

With contamination problems like this becoming an increasing threat in our technological food system, FSQS established a comprehensive emergency response system for dealing with these incidents. The new system sets conditions that trigger a coordinated effort to determine the source and scope of the contamination and outlines actions to be taken in an

emergency from initial detection to final clean-up. FSQS is also planning other actions to handle food and environmental contamination problems, including a plan to request legislative authority to quarantine suspect animals on the farm and to enable faster and more accurate tracing of the source of contamination problems, through mandatory owner identification of all animals sent to slaughter. FSQS will also increase research efforts to find faster and more effective tests for detecting chemical residues in foods, including increased and earlier sampling of tissues for residues, expanded research in new detection techniques, a broadened information base, and a greater reliance on private sampling. However, none of the systems currently in effect can guarantee a food supply free of chemical residues. Although some 140 chemicals are regularly used in food production, FSQS has the technical capability of identifying only 43 through laboratory testing. None of these potential contaminants are as potentially toxic as PCB's; nonetheless, tolerances for these chemicals cannot even be policed at this time. The USDA residue monitoring program does not and was not designed to certify that meat, poultry and egg products are free from chemical residues. Rather, the program relies on sampling techniques to detect “some” residues with “reasonable” accuracy and, if they are identified, to stop their spread throughout the food chain. FSQS is currently undergoing an intensive analysis of its role in assuring meat or poultry free of dangerous residue. The PCB incident demonstrated risks previously only hypothesized, and generated a public concern that makes a greater commitment to residue monitoring more feasible.

#### IMPROVEMENTS IN FSQS PROGRAMS

Besides looking at the residue monitoring program, FSQS is examining the entire inspection system. The first in a series of reforms was instituted in April, 1979, when a new technique for inspecting young chickens or broilers was approved, allowing the inspector to use fewer hand motions to check the inside, outside and internal organs of the bird. Less handling saves time and money and makes the job less tiring. Department inspection officials are considering other ways to trim costs, including the use of certified plant employees to remove questionable birds from the line before the inspector sees them. These employees would not have authority to approve birds.

*(Continued on page 228)*

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**Carol T. Foreman**, Assistant Secretary of Agriculture, is a member of the board of the Commodity Credit Corporation. She directs the Food and Nutrition Service, which includes all of USDA's domestic food assistance programs, and the Food Safety and Quality Service.

# BOOK REVIEWS

THE NEW INTERNATIONAL ECONOMIC ORDER: A U.S. RESPONSE. *Edited by David B. H. Denoon.* (New York: New York University Press, 1979. 346 pages, appendix and index, \$20.00.)

In the 1970's, the United States was completely unprepared for the rapid increase in oil prices and the demands made by the less developed countries (LDC's) "for a reshaping of the entire international economic system," a New International Economic Order (NIEO). This informative volume, prepared at the request of the United Nations Association of the USA (UNA-USA) by a group of labor, business, agricultural and academic leaders, evaluates the impact on the United States of the LDC's demands and outlines the possible American response.

The collection of technical papers, ably edited by David Denoon of New York University, includes discussions in three policy areas: trade, commodity policy, and problems of capital flow. Among the conclusions reached by these studies: joint gains are possible for developed and less developed countries; "benefits from reduced tariffs and increased trade far outweigh the costs"; "the world economic system needs stability"; the linkage of a country's economic system with others leads to "tangible" rewards.

Denoon points out that because "our trade with all LDC's is now more important to us than our trade with Europe and Japan combined, . . . there is the possibility that there will be an increasing divergence between our trading interests and our perceived national security interests." He believes that the United States must continue to look after its "critical allies," but must also stress "the delicate nature of the international economic system and try to form cooperative arrangements that could mute the 'rich versus poor country' schism. . . ."

The findings in this volume, presented at least in part for "an American policy-maker who needs a balanced . . . assessment" of economic strategies, will also be of great interest to knowledgeable readers seeking information on complicated questions of international economics. O.E.S.

ENERGY AND EMPLOYMENT: ISSUES AND AN AGENDA FOR RESEARCH. A Report of the Energy and Jobs Panel. (New York: Economic Policy Council of UNA-USA, 1980, 24 pages.)  
TRADE ISSUES FOR THE 1980's. (New York: Economic Policy Council of UNA-USA., 1980.)

These brief booklets are two in a series of in-

formative reports being published by the Economic Policy Council of UNA-USA. O.E.S.

TITO'S YUGOSLAVIA. *By Duncan Wilson.* (New York: Cambridge University Press, 1980. 269 pages and index, \$27.50.)

With a major succession crisis and far-reaching internal changes in the offing, an evaluation of Yugoslavia under Tito is most timely. Wilson is a former British ambassador who served in Yugoslavia and in the Soviet Union, and his account of Yugoslavia's postwar political history provides a convenient basis for speculation on prospects for the government after Tito.

Alvin Z. Rubinstein  
University of Pennsylvania

ARMS TRANSFERS TO THE THIRD WORLD. *Edited by Uri Ra'anani, Robert L. Pfaltzgraff, Jr., and Geoffrey Kemp.* (Boulder, Colo.: Westview Press, 1979. 410 pages, \$23.75.)

The sale of arms to developing countries has become a big business, a source of regional instability, and an important dimension of the Soviet-American rivalry. In a series of 16 thoughtful, solidly researched essays, specialists analyze the arms transfer phenomenon. A.Z.R.

WEST GERMAN FOREIGN POLICY: 1949-1979. *Edited by Wolfram F. Hanrieder.* (Boulder, Colo.: Westview Press, 1980. 245 pages, \$22.50.)

The role and importance of the Federal Republic of Germany in the Western alliance and the evolving international system are the subject of the essays in this volume, which give West Germany's foreign policy the attention that it merits.

A bibliography and index would have enhanced the value of the book; and an inexpensive paperback edition would undoubtedly find widespread use in college classrooms. A.Z.R.

COMMUNIST REFORMATION: NATIONALISM, INTERNATIONALISM AND CHANGE IN THE WORLD COMMUNIST MOVEMENT. *Edited by G.R. Urban.* (New York: St. Martin's Press, 1979. 335 pages and index, \$19.95.)

In a series of ten interviews with eminent Westerners and former Communists, G.R. Urban offers an informed assessment of the problems facing Moscow in its attempt to retain its control of the world Communist movement. A.Z.R. ■

## MEDICINAL DRUGS: RISKS AND REGULATIONS

(Continued from page 205)

With the greater regulatory barriers to drug testing in the United States, many firms have adopted a strategy of clinical testing in foreign countries, where subjects can be found more easily and cheaply, and where the firm faces less risk of liability suits. Informed consent requirements are much more stringent in the United States. The percentage of new chemical entities first studied abroad rose from approximately 5 percent in 1964 to over 40 percent in 1976. This percentage is much higher for larger companies that have multinational operations. The fact that a significant number of these drugs never reach the IND stage suggests that foreigners are being used as "guinea pigs" for drug research. While this may be desirable from an economic perspective, it represents a double-standard approach to informed consent and may have adverse implications for United States foreign policy.

The increased cost of developing a new drug can be expected to lead to increased drug prices as firms attempt to recoup these costs. Moreover, because of reduced competition from new drugs, as the market share of NCE's declines, overall drug prices tend to increase, albeit only slightly.<sup>19</sup> Table 2 shows that the overall price index for prescription drugs has performed well in comparison with the level of prices for medical care services or for the general economy. However, this index is biased downward because the market basket of drugs is not changed often enough to reflect changes in actual drug consumption patterns brought about by the relatively rapid introduction of new drug products. Also, the rise of the so-called "branded generic" and increased price competition among older drugs as patents expire have acted to keep prices on older drugs from increasing at the same

pace as the rest of the economy.<sup>20</sup> As is evident from the data in recent years, the drug sector is not immune to general inflationary pressures, and future price increases for drugs can be expected.

As the innovational process becomes costlier and riskier, concentration of innovation can be expected to occur. A firm must have a larger number of research and development projects to obtain a reasonable expectation of adequate profitability and return on investment. Small and risk-averse firms are likely to transfer resources out of new drug development as research costs rise. This has indeed been the case in the pharmaceutical industry: in 1957-1961, the top four innovating firms accounted for 46.2 percent of all NCE's introduced; by 1967-1971, this had increased to 61.0 percent. The number of firms with at least one NCE dropped from 51 to 23 in this period. Not only are fewer firms responsible for most of the innovation, but these tend to be the larger drug firms: in 1957-1961, the four largest drug firms accounted for 24.0 percent of all NCE's introduced; by 1967-1971, they accounted for 48.7 percent. The more innovative firms tend to be the large multinational companies, who can carry on research in foreign countries in order to reduce the time and costs of new product development.<sup>21</sup>

In an industry where product competition is the dominant theme, the implications for competition of concentrating innovation cannot be overlooked. The increased concentration of market shares is a likely result, with concomitant effects on market power and profits. Drug industry profit rates<sup>22,23</sup> are 40 to 50 percent higher than for all United States manufacturing. There is a continuing debate regarding whether these profits can be termed "excessive."

### IMPROVED PRODUCT QUALITY

With all these deleterious effects, the question arises whether the regulations have had any positive effect on the quality of drugs marketed in this country. Is there any evidence to demonstrate that the regulations have met their intended objectives?

The conservative policy of the FDA is credited with avoiding the thalidomide disaster in this country. It is also argued that the FDA's caution on beta-blockers prevented the marketing of practolol and several other related drugs that were found, after their release in foreign countries, to be associated with oculo-cutaneous and peritoneal toxicity. Many beta-blockers also appear to be carcinogenic. However, the benefits of practolol to patients suffering an anterior myocardial infarction greatly outweigh the risks, and it has been estimated that proper use of practolol in postinfarction patients could save at least 10,000 lives per year in the United States.

A study of the therapeutic implications of the drug lag showed that in many therapeutic areas, drugs

<sup>19</sup>Sam Peltzman, "The Benefits and Costs of Drug Regulation," in Richard L. Landau, ed., *Regulating New Drugs* (Chicago: University of Chicago, Center for Policy Study, 1973), pp. 113-212.

<sup>20</sup>Multiple-source drugs now account for over 44 percent of all prescriptions, and significant price competition prevails in this segment of most therapeutic markets. Also, firms must reduce prices on older products to compete with new products that are of higher quality (Schwartzman, 1979; Weston, 1979).

<sup>21</sup>Henry G. Grabowski and John M. Vernon, "New Studies on Market Definition, Concentration Theory of Supply, Entry, and Promotion," in Chien, *op. cit.*, pp. 29-52.

<sup>22</sup>Oswald H. Brownlee, "Rates of Return to Investment in the Pharmaceutical Industry: A Survey and Critical Appraisal," *ibid.*, pp. 124-142.

<sup>23</sup>Based on estimated true rates of return, not book rates of return, which are even higher. R&D expenditures should be counted as investment, not current expenses.



**TABLE 2: Consumer Price Index (1967-100) for All Items and Medical Care Components: United States, Selected Years 1960-78**

Item and Medical Care Component	1960	1965	1970	Year 1975	1976	1977	1978
CPI, all items less							
medical care	89.4	94.9	116.1	160.9	169.7	180.3	193.9
All Medical Care	79.1	89.5	120.6	168.6	184.7	202.4	219.4
Medical Care Services	74.9	87.3	124.2	179.1	197.1	216.7	235.3
Drugs and Prescriptions	104.5	100.2	103.6	118.8	126.0	134.1	143.9
Prescriptions	115.3	102.0	101.2	109.3	115.2	122.1	132.1
Over-the-counter items	—	98.0	106.2	130.1	138.9	148.5	159.1

Source: U.S. Department of Health, Education, and Welfare, Public Health Service, Office of Health Research, Statistics and Technology, *Health United States 1979*, DHEW Publication No. (PHS) 80-1232, 1980, p. 247.

introduced earlier or exclusively in Britain were safe, effective and, in many cases, uniquely important. It does not appear that the United States has avoided any significant amount of drug toxicity by its more conservative drug approval criteria. The level of adverse drug reactions in Great Britain does not appear to be unusually high or increasing, and a majority of drug-related deaths in both countries are caused by older drugs with known toxic potential.

A survey of physicians in 20 teaching hospitals in Great Britain showed that those drugs exclusively available in Britain in five therapeutic areas—angina, hypertension, asthma, pyelonephritis and gastric ulcer—were widely regarded as important drugs. The drug lag is apparently not due to the introduction of trivial products in Britain.<sup>24</sup>

An examination of the distribution of approved NDA's by therapeutic value reveals that not all are "important therapeutic gains." Using the FDA's rating system, of the 413 NDA's approved over the period 1974-1978, only 30, or 7.3 percent, represented important gains. Of the 1,816 drugs currently under active IND's, only 39, or 2.14 percent have potentially major therapeutic value. Thus, much of the FDA's workload deals with drugs of little or modest gain over drugs already being marketed.

It is not possible to quantify the total net benefit to the American public of relatively conservative drug approval standards. Any drug, including aspirin, if taken in sufficient quantities or over a sufficient period of time will cause adverse effects. Given the multiple causes of disease, it is often not possible to isolate the effects of a specific chemical entity.<sup>25</sup> Balancing carcinogenicity and teratogenicity against any thera-

peutic benefits requires that each effect be valued. Our society appears to be particularly risk averse in these matters. The optimal balance of risks and benefits in Great Britain may not be the same in the United States.

### POLICY OPTIONS

There are many recommendations for ways to improve the performance of the United States pharmaceutical industry. Some of the frequently mentioned proposals include:

*Prescribing controls.* Give the FDA the authority to approve a drug for use only in certain settings, e.g., hospitals, or by certain specialists, e.g., cardiologists. The objective would be to prevent a drug from being prescribed by a physician who was largely unfamiliar with it or in situations where there were no resources to detect and/or deal with adverse reactions.

*Post-marketing surveillance.* Give the FDA the authority to require or actually conduct post-approval monitoring of the use of a drug in order to detect adverse effects. This could enable relaxation of safety standards since the FDA would not have to be absolutely sure that a drug was safe before giving approval.<sup>26</sup> The objective would be to give the prescribing physician more freedom and responsibility to select drugs specifically tailored to the clinical needs of his patients.

*Extension of drug patent life.* Increase the patent life on drugs by beginning the patent life when the NDA is approved, to provide increased incentive for innovation.

*Compulsory patent licensing.* Require drug firms to license other firms to produce and/or market a patented product at a reasonable royalty rate after two or three years, to improve competition at the retail level.

*Relative safety and efficacy.* Give the FDA authority to approve an NDA only if the drug is safer and/or more effective than the safest, most effective drug already on the market. This would reduce the proliferation of products representing only minor modifications of existing products.

*A national drug testing center.* Give the FDA the authority to test all new drugs on an intramural basis.

<sup>24</sup>Wardell, "British Usage and American Awareness of Some New Therapeutic Drugs," *Clinical Pharmacology and Therapeutics*, vol. 14, no. 6 (November-December, 1973), pp. 1022-1034.

<sup>25</sup>There is also the problem of extrapolating from animal tests to man. Drugs known to produce tumors or leukemia in animals but that are already widely used in man include isoniazid (anti-tubercular), metronidazole (anti-trichomonal), and griseofulvin (anti-fungal).

<sup>26</sup>When there is no post-marketing surveillance, the FDA must hold back for more testing to reveal all unsuspected toxicity before making an "all-or-nothing" decision.

This would give the FDA control over the actual conduct of drug tests on a prospective, as opposed to retrospective, basis and, presumably, would improve the reliability and accuracy of safety and efficacy tests.

*Elimination of trade secret classifications of drug safety and efficacy data.* This would avoid the duplication of tests by firms wishing to market the same product.

*Acceptance of foreign test data without domestic verification.* This would avoid the duplication of tests already conducted on foreign subjects.

*Adjustment of tax treatment of drug research expenditures.* Currently, all investment expenditures meeting certain criteria can be claimed for an investment tax credit. One proposal is to scale the tax credit according to the importance of the therapeutic value of the products produced by investment in research.

*Increased reliance on tort law.* Let the courts enforce the explicit and implicit product warranties. Firms will then internalize safety testing in order to avoid liability suits. This proposal would be accompanied by procedures to make legal action equally accessible to all patients, regardless of income.

*Decentralization of the approval process.* Make greater use of nongovernment expert committees to review NDA's.

*Cost effectiveness.* Require FDA to assess the cost effectiveness of all new drugs, so that drugs that offer greater cost savings could be expedited. Drugs that are less cost effective than existing therapies should not be approved.

Each of the above proposals would have both positive and negative effects on the performance of the pharmaceutical industry. These effects should be carefully assessed via an integrated, comprehensive public policy toward the drug industry.

## DRUG PRODUCT SELECTION

Efforts to reduce expenses for drugs through the substitution of less costly "generically equivalent" drugs have taken three forms: (1) substitution only within a predetermined list of drugs, termed a "positive formulary"; (2) substitution where not specifically forbidden, termed a "negative formulary"; and, (3) substitution according to the pharmacist's professional judgment, provided that the prescribing physician has not expressly forbidden any substitution, that any savings from the substitution of a lower cost drug are passed on to the consumer, and that the pharmacist must make such a substitution if the patient so requests.

Repeal of anti-substitution laws has been pushed by consumer groups and professional pharmacist associations on the grounds of expected cost savings, hypothesized to be 35 percent and up, and increased professional stature for pharmacists, without adversely affecting the quality of care.

An evaluation of the impact of drug product selection legislation in Michigan, which has enacted the third form described above, reveals a number of important findings.<sup>27</sup>

1. The rate of substitution is very low and does not appear to have been affected by the passage of the legislation. Less than 1 percent of all prescriptions are substituted.

2. Substitution lowers the price of the prescription by approximately 24 percent.

3. Physicians have not demonstrated a strong resistance to substitution; "dispense as written" prescriptions have averaged about 5 percent of all prescriptions.

4. Pharmacists tend to dispense lower priced products for prescriptions written generically.

5. Multiple-source drugs account for slightly over 50 percent of all prescriptions.

6. 19 percent of all prescriptions are written generically.

It is clear that a very substantial potential cost savings from substitution is not being realized. The habits of physicians, pharmacists and patients are very persistent. Drug product selection legislation should not be termed a failure until sufficient time has elapsed for these habits to adjust.

Heretofore, the analysis has been made from an aggregate perspective—the greatest good for the greatest number. Such an approach may overlook the problems of an individual consumer. We must come full circle in our analysis of consumer protection regulation and ask, again, whose preferences count. The answer ought to be those of each individual. Based on introspection, the goals of drug relation ought to enable a physician: (1) to select the safest drug possible for treating a medical problem; (2) to assure the patient that all generic equivalents of that product are therapeutically equivalent, or, if not, which are not equivalent, so that the patient can ask the pharmacist to give him the least expensive product; and, (3) to provide the patient with a full range of available products, including those not fully tested, when an illness does not respond to the first, second, third, etc., drug of choice.

Attainment of these objectives calls for a flexible partnership among the physician, the pharmacist, the regulator and the drug manufacturer. No one party should have complete responsibility or control over the availability of a drug. A system of checks and balances is required; yet confrontation politics should be avoided. The FDA cannot determine how every drug will affect each patient or disease, and the physician cannot run tests on the safety and efficacy of each drug he prescribes. The medical profession, the regulatory agency, and the industry must work together for the health of the patient, but the patient must also take responsibility for his own welfare. He

<sup>27</sup>Goldberg, *op. cit.*

must ask questions: Is there a less expensive drug that is just as safe and effective? Are there drugs that could help that are not available in this country yet? Is any research being conducted on better methods to treat this disease? The patient should be a participant, not a pawn in the drug choice process. ■

## PROTECTING CONSUMERS: YESTERDAY, TODAY AND TOMORROW

(Continued from page 196)

Congress has sketched the general powers and objectives of the regulatory agencies. Filling in the details necessary to implement a program is left to the agency itself. In the 1960's, Americans were concerned that the regulatory agencies had become too lethargic and were doing too little;<sup>12</sup> more recently, a frequently heard concern holds that they are doing too much, adding to inflation by mandating new health and safety standards and limiting competition. This concern has formed the basis for recent demands for deregulation. Conservatives and consumer advocates generally agree that reducing government economic regulation could increase competition and benefit consumers in areas like transportation. It is not so clear, however, exactly how consumers would be protected if regulations covering health, safety, information and redress were relaxed.

Various concerns about the performance of regulatory agencies are expressed both by business and by interested consumers. A frequent concern expressed by consumers is that the regulatory agency has been captured by the industry it is supposed to regulate and has forgotten its responsibilities to consumers. While this concern seems valid for some of the older agencies engaged in economic regulation it may be less valid for some of the newer ones. Most of the newer agencies, like the Environmental Protection Agency and the Occupational Safety and Health Administration, are engaged in social regulation and do not regulate single industries. As a result, their capture seems less likely.

A second frequently expressed concern about the performance of regulatory agencies has been the lack of accountability. Many regulatory agencies were created as independent boards and are not really responsible to either the Congress or the President. While they were given this independence to insulate them from political pressure, some critics feel they have too much power and too much independence.

<sup>12</sup>Edward F. Cox, Robert C. Fellmeth and John E. Schulz, *Nader's Raiders: Report on the Federal Trade Commission* (New York: Grove Press, 1970).

<sup>13</sup>For an examination of the historical development of consumerism see Robert O. Herrmann, "Consumerism in Historical Perspective," in David A. Aaker and George S. Day, *op. cit.*, pp. 27-36.

Recent and proposed laws have aimed at making regulatory agencies more responsive to the Congress or to the public. A major goal of consumer advocates during the late 1960's and the 1970's was the creation of a consumer protection agency with powers to intervene in regulatory proceedings to ensure that consumer interests were adequately represented. Recent proposals to provide for congressional review of Federal Trade Commission regulations were an effort from another direction to limit independence.

## RESPONSE OF CONSUMERS

The first major consumers' organizations were the local and state Consumers Leagues first formed in the 1890's.<sup>13</sup> These groups sought to use consumer pressure to improve working conditions in manufacturing and retail trade. In the early 1900's, the attention of the local groups and their national organization, the National Consumers League, increasingly turned to health and sanitation issues that affected both workers and consumers.

In the late 1920's, growing consumer concern with advertising pressures and the absence of useful product information led to the formation of Consumer's Research (CR) in 1929, and Consumers Union (CU), an offshoot of CR in 1936. Both organizations are independent, consumer-supported product testing organizations. Their test results are disseminated in their magazines along with their commentary on marketing practices.

Sporadically over the past 100 years, consumers have been concerned about the need for new protective legislation and a clearer voice in government decisions. Over most of that period, consumer concerns were voiced by temporary coalitions organized around particular issues. Since the 1960's, consumer interests have been represented by two continuing organizations that have been active in lobbying—the Consumer Federation of America (CFA) and the groups associated with Ralph Nader. The CFA is a federation of over 250 organizations, including state and local consumer groups and other organizations with consumer interests, labor unions, consumer cooperatives and associations of retired people. The organizations associated with Ralph Nader engage in a comprehensive program of investigating consumer problems, publicizing their research results, proposing corrective measures, lobbying for their passage and monitoring their implementation. Despite the efforts of CFA and Nader and his associates, the problem of consumer representation and participation in government decision-making continues to be a major concern of consumer advocates.

A few consumers have responded to the problems of the marketplace by attempting to gain more independence from it. Concerns about rising prices, shortages, the environment and the need for self-realization

have led these consumers to experiment with new life-styles. These life-styles emphasize self-sufficiency, home production, recycling and reduced levels of living. Researchers who have studied the phenomenon have labeled it "voluntary simplicity" and suggest that it is likely to spread more widely.

## RESPONSE OF BUSINESS

Public demands for increased consumer protection and regulation of business forced business into a defensive posture in the 1960's and early 1970's. Businessmen grumbled but adapted to the new regulations. Some firms made efforts to improve their redress procedures and provide representation of consumer interest by creating consumer affairs offices within their firms. The available evidence suggests that these offices function chiefly as complaint bureaus and have little influence on overall company policy.<sup>14</sup>

During the 1970's, business counterattacked with demands for deregulation. Anxiety about the growth of government, rising taxes, the contribution of regulation to inflation, and disappointment with the results of some regulatory programs made the public increasingly receptive to business arguments.<sup>15</sup> Playing on these concerns, the well-organized and carefully coordinated efforts of business led to the defeat of proposals for a consumer protection agency.<sup>16</sup> Consumer advocates have become more and more worried about business efforts to win public support for deregulation because they are well-financed, sophisticated and pervasive.

Support for consumer protection regulation appears to be peaking out.<sup>17</sup> Many of the most pressing problems have been dealt with, and public attention is shifting elsewhere. Inflationary pressures are reducing both the money and time individual consumers are willing to contribute to organized consumer groups. Business counterattacks make legislative efforts more difficult. But despite these evidences of decline, concern for consumer protection will undoubtedly survive. The continuing flow of new technology and a large and impersonal marketplace make new problems certain. A variety of consumer organizations and

regulatory agencies remain in place to monitor these problems. And when new problems occur, the public will be far easier to arouse than it was in past years. Today's consumers, after the experiences of recent years, are more aware of consumer problems and more sensitive to their implications. They will not hesitate to demand action, and they know how to go about organizing to get it. ■

## ENERGY AND THE CONSUMER

(Continued from page 213)

The light water reactors in current use in the United States are by most standards at least as safe as any other technology used to generate electricity. If we rely on the statistical data based on more than two decades of nuclear energy generation in this country, the nuclear industry is safer than power generation from gas, oil or coal, technologies with which the public is comfortable but which lead to the loss of hundreds of lives each year. To date, commercial nuclear energy generation has not caused a single fatal accident.

Radioactive waste disposal is a technological problem with many proposed bench scale solutions.<sup>22</sup> The major impediments to handling nuclear wastes are social and political and not technical. Current strategies call for immobilization in ceramics, synthetic rocks, or metal matrices, followed by monitored storage in retrievable casks in geologic deposits like salt domes, granite, basalt, or shale. The inclusion of nuclear wastes in materials with low leach rates and away from ground water is part of a strategy for storage and environmental immobilization.

## FUTURE ENERGY SOURCES

In the longer perspective, solar energy, nuclear fusion and oil shale for synfuel development are the most important future energy sources. Electricity from solar and fusion energy will require several decades of research and development and probably will become significant factors in our energy future well beyond the year 2000. The full development of the technology for solar space and water heating is very close; both the combined solar space heating and cooling technology and the oil tar sand technologies may be developed in a reasonably short time. Because they will give us a greater diversity of energy resources, it is also important to develop other technologies like geothermal energy, wind energy, biomass, urban waste, and energy from the ocean.

<sup>22</sup>Management of Commercially Generated Radioactive Waste, DOE/EIS-0046-D, 1979; *Environmental Aspects of Commercial Radioactive Waste Management*, DOE/ET-0029, 1979; *Report to the President by the Interagency Review Group on Nuclear Waste Management*, TID-29442, 1979; *Scientific Basis for Nuclear Waste Management*, Proceedings of a Symposium of the Materials Research Society, November 26-30, 1979 (Cambridge, Massachusetts).

<sup>14</sup>Claes Fornell, *Consumer Input for Marketing Decisions: A Study of Corporate Departments of Consumer Affairs* (New York: Praeger, 1976).

<sup>15</sup>Concerns with the performance of the regulatory agencies and the impact of regulation are outlined in George A. Steiner, "New Patterns in Government Regulation of Business," *MSU Business Topics*, vol. 26, no. 4 (Autumn, 1978), pp. 53-61.

<sup>16</sup>George Schwartz, "The Successful Fight Against a Federal Consumer Protection Agency," *MSU Business Topics*, vol. 27, no. 3 (Summer, 1979), pp. 45-57.

<sup>17</sup>Robert O. Herrmann and Rex H. Warland, "Does Consumerism Have a Future?" Paper presented to the annual conference of the American Council on Consumer Interests, San Diego, April 19, 1980.



These sources of energy will be available only in the future. In the interim, there is no choice; if the United States is to maintain its highly organized economy, coal and nuclear power must become our dominant energy sources. The risks of abrupt social, political and economic changes related to continued dependence on imported oil may be too great for any other decision. Nonetheless, society must not only seek answers to these fundamental questions but must also develop new social institutions to meet the challenge of revolution. ■

## CONSUMER PRODUCT SAFETY

(Continued from page 209)

blunt and imperfect tool, and is often counterproductive.

While an in-depth analysis of the political system controlling government regulation is beyond the scope of this essay, nearly all models of political decision-making focus on the influence of special interests. Indeed, this is the very essence of politics. Regulation in practice must survive within a political environment and is always subject to political influence and constraints. Therefore, despite the ideal gains associated with market intervention, actual intervention inevitably serves more specific purposes.

As Charles Schultze, a prominent economist and long-time promoter of social goals, points out in his instructive book, *Public Use of the Private Interest*, it is not the attainment of social goals that our society must abandon.<sup>14</sup> Rather, the means by which society has attempted to achieve these goals must be reconsidered. The flaws of the uncontrolled market must be considered in arguments for intervention, but the flaws of the regulatory agencies must be evaluated as well. When social goals are at stake, alternatives to direct regulation seem more suitable to the attainment of specific goals. Thus, a greater reliance on the use of incentive systems like taxes and on the use of liability assignment for internalizing the costs associated with hazards may be less susceptible to the failures of regulation. ■

<sup>14</sup>Charles L. Schultze, *Public Use of the Private Interest* (Washington, D.C.: Brookings Institution, 1977).

## THE CONSUMER AND FOOD

(Continued from page 221)

Another area of study is flock testing. Under today's modern raising conditions, flocks tend to be uniform, and it is possible that disease conditions can be determined by testing representative samples of a flock sent for slaughter.

FSQS is also proposing to modernize the inspection of processed products, like hot dogs, beef stew and pot pies. Under the proposal, department inspectors

could use information collected from firms running FSQS-approved "quality control" systems, operated by plants to make sure their products meet department safety and labeling requirements, as well as their own quality standards. Properly run and verified quality control systems are an important part of modernizing inspections to meet the challenges of a changing society and changing technology.

The protection of the food consumer involves government agencies at all levels—federal, state and local—working in tandem with consumer groups, trade associations, and the food industry, to meet the challenges of the 1980's. ■

## EDUCATING CONSUMERS: WHOSE RESPONSIBILITY?

(Continued from page 217)

promises, can destroy that valuable business asset. So advertisers are doubly careful in making product claims.<sup>17</sup>

If the regulatory policies of the organization are based on this kind of naiveté, it is no wonder that outside regulation is often called for. Professor Ralph Winter, a critic of the consumer movement and of government regulation in general, has recognized that "government must play a role in suppressing false advertising."<sup>18</sup>

The strongest brief on behalf of self-regulation may be that advertising is so extensive that monitoring and enforcement activities by outside regulators would necessarily be limited. Even internal industry regulation would be impossible without self-restraint on the part of individual advertisers. From a consumer standpoint, however, internal restraints must be supported by outside forces in order to keep balance in a system that is vital to consumers but is essentially controlled by business. Consumer groups, especially at the local level, should respond both positively and negatively to the advertising policies of firms with which their members deal. Their activities must be supported by adequate laws and effective enforcement.

The role of the media is related to the role of business in consumer education; because it is a non-government source with a professional mandate to present news and information objectively, consumers hope that the media will provide information about matters of consumer concern. To some extent this is true. There are consumer reporters: "market basket surveys" or other local price comparisons are published, and "Action-Line" responses deal with selected consumer problems. The movement is new

<sup>17</sup>American Advertising Federation, *op. cit.*

<sup>18</sup>Ralph K. Winter, "The Consumer Advocate Versus the Consumer," in Aaker and Day, *op. cit.*, p. 99.

and expanding, and newspapers are beginning to see themselves in the role of consumer educators; some even provide packets of consumer education materials to schools based on the consumer-related items in their papers.

However, the media are the conduit of most commercial advertising and could not survive without the financial support which it provides. To what extent can the broadcast and print media take on the role of consumer protector by not broadcasting or publishing deceptive or misleading ads? Probably they could be more helpful, many involved in the consumer movement would say, and some journalists would concur.

While free speech questions continue to be aired, the media have always had wide latitude in accepting and rejecting advertising material. Most publications and broadcast organizations enforce guidelines that exclude certain types of advertising materials. The Television Code has detailed guidelines regarding acceptable advertising, including a general prohibition of "false, misleading, or deceptive advertising." The media, however, are exempt under federal law and under most state laws from penalties for the dissemination of such advertising, even if the advertising itself is illegal.

While some types of material are screened out, false and deceptive advertising continues to flood the media. As a practical although non-scientific experiment, for two semesters members of a college class in consumer law were asked to bring in three to five examples (from any source) of advertising they regarded as "false, misleading or deceptive." About 80 percent of their examples came from recognized national magazines or mainstream local newspapers rather than from marginal publications or obscure mail order sources. Approximately one-half the advertisements sold nationally known brands. The other half sold items like weight control devices, diet pills or books that guaranteed to raise your bowling score or heal your ailments through hand reflexology.<sup>19</sup>

Certainly the most obvious of these deceptions, which prey on the most vulnerable consumers, could be weeded out through greater vigilance on the part of newspapers, magazines, radio and television. It would take a relatively small financial sacrifice in most cases to purge the most obvious violators of their existing advertising codes.

Most formal consumer education in this country occurs in traditional educational settings, generally in the public schools. Many state and local governments

support the teaching of consumer education in the schools in a variety of ways—by establishing consumer education programs, by requiring that all students study consumer education, by the preparation of special teaching materials, or by direct financial assistance to schools. The level and type of support for consumer education programs varies with each state and locality. Each state department of education receives and distributes federal funds under the "Consumer and Homemaking Education" section of the Vocational Education Act. A recent survey of state education agencies showed that 31 states have implemented additional policies in consumer education, including 24 that require that students receive some level of instruction in consumer education or consumer economics.<sup>20</sup> Even states without formal consumer education policies generally support consumer education to some degree, mostly in school settings. Community education programs are providing a real growth area for consumer education, whether sponsored by local school districts, local government agencies, or private community organizations.

The federal government has supported consumer education programs, although in a more limited way. Rather than sponsor programs directly, the federal government has more often given program and curricular support to educators at the state and local level. While many federal agencies perform consumer-related functions, Mayer and Nicosia's study of consumer information sources mentions only four as being significantly involved in consumer education—the Federal Trade Commission, the Office of Consumer Affairs, the Office (now Department) of Education, and the Agriculture Department's Extension Service.<sup>21</sup> The most recent new source of funding for consumer education programs around the country is the Office of Consumers' Education in the Department of Education, which has been allocating \$3 million to \$4 million a year since 1976 for the development of consumer educational programs and materials at the local level. Grant recipients have included state and local education agencies, colleges and universities, organized community groups and other organizations.

Most federal agencies promote education through the publication and dissemination of materials. This provides a flood of material about the work of federal agencies, to increase the marketplace skills of consumers and to inform them of their rights by explaining federal law. A clearinghouse, the Consumer Information Center, has been established in Pueblo, Colorado, to facilitate the dissemination of free and inexpensive consumer material produced by federal agencies.

The federal government also provides information to consumers by means of regulatory activity, i.e., requiring labels with specific content on certain prod-

<sup>19</sup>Author's survey.

<sup>20</sup>Robert J. Alexander, *State Consumer Education Policy Manual* (Denver: Education Commission of the States, 1979), pp. 5-7.

<sup>21</sup>Robert N. Mayer and Francesco M. Nicosia, "Consumer Information: Sources, Audiences, and Social Effects," in Robert N. Katz, ed., *Protecting the Consumer Interest* (Cambridge, Mass.: Ballinger, 1976), p. 51.

ucts, setting up quality or size standards, and preventing deceptive packaging. State and local governments tend to mirror the informational functions of the federal government.

The major regulatory activity of the federal government that involves information is the jurisdiction of the Federal Trade Commission (FTC) in the area of deceptive advertising. Although the commission was established in 1914 to enforce the anti-monopoly laws against "unfair methods of competition," its implied power to control deceptive advertising was not firmly established until the Wheeler-Lea Amendment of 1938. Like many federal agencies, the FTC has been criticized for ineffective performance of its duties. A group of students working for Ralph Nader in 1969 charged that the agency failed to detect violations, establish priorities, enforce existing law, or seek effective resources and authority.<sup>22</sup> A committee from the American Bar Association largely endorsed these findings shortly thereafter. After some changes had been implemented, a later evaluation found that despite some promising developments after "decades of neglect," the agency was still trying to respond to individual complaints rather than attacking the legal environment that made the deceptive practices possible.<sup>23</sup> By this time, at least in theory, the FTC had gained very broad legal powers over trade practices, including deceptive advertising through mass media and individual selling practices. It had the power to promulgate trade practice rules for specific industries, and it had gained enforcement power over additional consumer protection statutes. Strong leadership and effective political support was needed for the continued implementation of the powers of the commission.

By 1979, the image of the commission had entirely reversed itself in the eyes of many members of Congress and lobbyists. It was the business community rather than consumer advocates who were criticizing the agency. Under the leadership of Michael Pertschuk, a chairman with a strong consumer background, the FTC took the brunt of the attack on government regulation, a dominant political mood in the country. At the time of this writing, three actions await House-Senate Conference Committee endorsement, having passed at least one house of Congress. All three curtail the power of the FTC to control consumer information sources—prohibiting the investigation of price disclosure in the life insurance

industry, killing a proposed funeral industry rule, and prohibiting rule-making with regard to unfairness in advertising. All three actions arose from studies the FTC made of the affected industries, including a study of television advertising directed to children.

If the political climate seems to be tightening up in regard to federal powers over consumer information sources and advertising, there is still no evidence that the legal climate in the courts is following suit. Deceptive advertising continues to be subject to broad and evolving legal standards. The courts and the FTC continue to try to determine exactly what constitutes deception in advertising, how much puffery or exaggerated praise will be allowed in product descriptions, and what type of counter-advertising can be ordered as remedial action for proved deception. Ambiguity makes some true statements misleading—as when a statement inspires unreliable assumptions—while some obvious untruths mislead no one. An outside forum like a court is the appropriate place to solve such disputes. Advertisers, consumers and the FTC must attempt to clarify guidelines, so all sides know what standards must be met.<sup>24</sup>

State legal guidelines in regard to deceptive advertising are close to federal precedents in most areas. Many states actually preceded the federal government in making "untrue, deceptive, or misleading" advertising illegal based on the so called "Printer's Ink" statute suggested in 1911 and ultimately passed in almost all the states. The statutes did not prove effective in most places, however, because they were based on weak common law precedents, contained limited enforcement powers for officials and were criminal rather than civil statutes, making many prosecutors reluctant to enforce them. A more useful approach has been the enactment by almost every state of "little FTC acts," which follow federal standards closely, but generally add private rights of action not available under federal law, as well as local investigative and enforcement powers. The framework of enforcement powers is broad, but the resources to carry them out are often very limited.

This summary of the roles of consumers, government and business in consumer education yields no final equation for establishing a proper balance. Searching for that balance, consumer education should adopt a consumer-oriented perspective. This is not the same as saying that there is only one consumer interest or that consumers are always right. But a marketing course will view consumer behavior from a different perspective than a consumer education course. Consumers should understand business and government just as business must know its customers and government its citizens. The three sectors must work together, recognizing that while conflict is unavoidable, cooperation is possible. ■

<sup>22</sup>Edward F. Cox, Robert C. Fellmeth, and John E. Schulz, *"The Nader Report" on the Federal Trade Commission* (New York: Richard W. Baron, 1969).

<sup>23</sup>Thomas G. Krattenmaker, "The Federal Trade Commission and Consumer Protection," in Katz, *op. cit.*, pp. 105-130.

<sup>24</sup>David M. Gardner, "Deception in Advertising: A Receiver Oriented Approach to Understanding," in Maynes, *op. cit.*, pp. 113ff.

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# TWO MONTHS IN REVIEW

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*A Current History chronology covering the most important events of March and April, 1980, to provide a day-by-day summary of world affairs.*

## INTERNATIONAL

### Afghanistan Crisis

- Mar. 1—In Washington, D.C., it is reported that the Soviet Union has airlifted additional soldiers to Afghanistan, bringing the total of Soviet troops there to 75,000; 25,000 more are stationed along the Soviet-Afghanistan border.
- Mar. 4—In Kunar Province, Afghan rebels are reportedly routed after 5 days of intensive fighting between the rebels and Soviet and Afghan troops; more than 1,000 civilians and insurgents are reported killed.
- Apr. 11—The Afghan military reports that 190 Soviet soldiers and advisers were killed in fighting with Afghan soldiers at an airbase outside Kabul.
- Apr. 12—U.S. President Jimmy Carter's call for an American athletes' boycott of the 1980 summer Olympic Games in Moscow because of the Soviet intervention in Afghanistan is upheld by the U.S. Olympic Committee in a 1,604-797 vote; unless the President decides by the end of May that a boycott is no longer in the national interest, no American will take part in the Olympics.

### Council of Europe

- Apr. 23—In a unanimous vote with 10 abstentions, the 21-nation Council of Europe's Parliamentary Assembly favors a resolution condemning Israeli settlement policy.

### East-West Center Conference

- Mar. 30—Leaders of Pacific Islands lands meet in Honolulu in a conference sponsored by the East-West Center; they adopt a joint regional development plan and approve the establishment of a Regional Development Fund.

### European Communist Party Meeting

- Apr. 29—At the conclusion of a 2-day meeting of European Communist parties in Paris, delegates issue a document urging "Communists, Socialists, Social Democrats and Christians" to unite for peace; 22 delegates attended the meeting, 6 boycotted it, and 2 maintained observer status.

### European Economic Community (EEC), Common Market

(See also *Iran Crisis*)

- Mar. 7—After 2 days of talks in Kuala Lumpur, Malaysia, the 14 Foreign Ministers of the European Economic Community and the Association of Southeast Asian Nations (ASEAN) sign an economic agreement and condemn Soviet policies in Afghanistan and Vietnamese policies in Cambodia.
- Apr. 10—Meeting in Lisbon, the Foreign Ministers of the 9 EEC countries refuse to impose economic sanctions on Iran or to reduce or close their diplomatic missions there.
- Apr. 12—In a meeting in Teheran with Iranian President Abolhassan Bani-Sadr, EEC ambassadors and the Japanese ambassador deplore the detention of the American hostages and ask for their release.
- Apr. 22—After 8 hours of argument, the Foreign Ministers of the 9 EEC countries compromise and vote unanimously to impose economic sanctions against Iran by May 17

unless there is "decisive progress" toward a resolution of the hostage problem. Iranian oil imports are not banned, nor will the 9 break diplomatic relations with Iran. The French had hoped for further delay in the move toward sanctions; the West Germans urged stronger measures.

- Apr. 27—At the opening of a 2-day conference in Luxembourg, the leaders of the EEC countries continue to indicate that they are still prepared to enforce sanctions against Iran by May 17; French President Valéry Giscard d'Estaing says that "France is determined to join with its allies in solidarity with the United States to work for release of the hostages . . ."
- Apr. 28—After a 2-day meeting in Luxembourg, EEC leaders pledge that their governments will impose sanctions on Iran on May 17.

### International Monetary Fund (IMF)

- Apr. 17—China is admitted as a member of the 140-nation International Monetary Fund, replacing Taiwan.
- Apr. 24—Meeting in Hamburg, IMF Finance Ministers drop for at least a year a plan to set up a dollar substitution plan within the IMF to promote monetary stability.

### Iran Crisis

(See also *Intl. EEC; U.S., Foreign Policy*)

- Mar. 4—Foreign Minister Sadegh Ghotbzadeh tells the visiting U.N. commission members that they will be permitted to visit all 50 U.S. hostages; militants at the U.S. embassy say they will only obey an order issued by the Ayatollah Ruhollah Khomeini.
- Mar. 6—Militants holding the hostages at the U.S. embassy agree to yield the hostages to the ruling Revolutionary Council.
- Mar. 8—At the last minute, the militants refuse to yield the hostages to Ghotbzadeh, claiming that he lied when he said the Ayatollah had consented to allow the U.N. commission to visit all the hostages.
- After a meeting with the Council, Ghotbzadeh says the militants may keep the hostages if they permit the U.N. commission members to talk to them.
- Mar. 10—In Teheran, Ayatollah Khomeini says commission members may meet with some of the hostages before they issue their report or with all of the hostages after they issue the report.
- In Washington, D.C., State Department spokesman Hodding Carter 3d insists that the commission meet with all the hostages before issuing its report.
- At the U.N., Secretary General Kurt Waldheim asks the U.N. commission to return to New York.
- Mar. 19—At the World Court, the U.S. protests the treatment of American hostages in Iran.
- Mar. 24—The deposed Shah Mohammed Riza Pahlavi arrives in Cairo from Panama.
- Despite the Shah's flight to Cairo, Iranian officials present extradition papers to Panamanian officials demanding the Shah's return.
- Mar. 28—In Cairo, doctors operate on the Shah and remove his cancerous spleen.



Apr. 1—Bani-Sadr announces that the Revolutionary Council will take control of the hostages if the U.S. formally promises not to do or say anything hostile until the new Parliament is elected and makes a decision on the hostages.

Apr. 2—In Teheran, Bani-Sadr says he has received assurances from President Carter that the U.S. will refrain from making hostile statements until the new Parliament meets.

In Washington, D.C., U.S. spokesman Jody Powell says the U.S. has agreed to show restraint toward Iran as long as progress is being made toward the release of the hostages.

Apr. 3—The Revolutionary Council fails to reach agreement on the transfer of the hostages. Foreign Minister Ghotbzadeh says the Council is "not satisfied" with President Carter's assurances.

Apr. 6—In Teheran, 3 U.S. clergymen lead Easter services for the hostages.

Apr. 7—Khomeini says the hostages must remain in the custody of the militants until the new Parliament decides their fate.

In Washington, D.C., President Carter breaks diplomatic relations with Iran, orders all Iranian diplomats to leave the U.S., and imposes a formal embargo on American exports to Iran; all visas issued to Iranians for future travel in the U.S. are invalidated.

Apr. 8—The U.S. State Department says that U.S. Secretary of State Cyrus Vance has sent notes to American allies around the world asking them to consider banning exports to Iran (except for food and medicines), recalling their ambassadors, and breaking off diplomatic relations with Iran.

Apr. 9—Militants in the U.S. embassy threaten to "destroy all the hostages immediately" if the U.S. begins "the smallest military action against Iran."

Apr. 13—In Teheran, representatives from 8 of the 9 Common Market countries meet with Iranian officials; they withdraw their ambassadors from Iran temporarily to protest the continued detention of U.S. hostages.

In an unprecedented news conference on European cable television, President Carter suggests that the West European allies of the U.S. should sever diplomatic relations with Iran by mid-May.

Apr. 17—President Carter announces a ban on imports from Iran and a ban on American travel to Iran; he declares that if economic and political actions fail to effect the release of the hostages, "some sort of military action" is "the prerogative and the right of the United States under these circumstances."

Apr. 21—Barbara Timm, mother of U.S. hostage Sergeant Kevin Hermening, is permitted to meet with her son inside the U.S. embassy in Teheran.

Apr. 23—Iranian officials announce new trade relations with East Germany, the U.S.S.R. and Romania.

In Teheran, for the 2d time this year the government orders the expulsion of all American journalists when their visas expire; no new visas will be issued to U.S. journalists.

Apr. 24—Foreign Minister Sadegh Ghotbzadeh warns the U.S. that if it tries to block Iranian harbors, Iran may block the rest of the Persian Gulf.

Apr. 25—In an early morning televised address, President Carter confirms an earlier White House report that because of equipment failure in 3 of 8 helicopters, a U.S. attempt to rescue the hostages was aborted last night. As they withdrew, 8 U.S. servicemen were killed when a transport plane carrying fuel and a helicopter collided on

the ground and burst into flames at a rendezvous in the desert 250 miles south of Teheran. The President takes full responsibility for the mission and for aborting the mission.

In Washington, D.C., it is reported that the rescue planes flew from bases in Egypt and refueled in Bahrain.

In Teheran, Ayatollah Khomeini denounces the U.S. attempt to rescue the hostages and warns that if the U.S. tries to rescue them again, the hostages will be killed.

Apr. 26—President Bani-Sadr says the hostages have been removed from the U.S. embassy and relocated in several cities throughout the country.

Bani-Sadr announces that the bodies of the 8 U.S. service men killed in the desert will be returned to the U.S.

Apr. 27—In Moscow, the Soviet Defense Ministry warns the U.S. not to attempt another "military solution." Pravda, the Soviet press agency, says the U.S. tricked its allies and used its "partners like chess pieces."

Apr. 29—At a televised news conference in Washington, D.C., President Carter defends the attempt to rescue the American hostages and says he will take any necessary and possible steps to free them; he repeats a statement made yesterday expressing "abhorrence and horror" at the public display in Teheran on April 27 of the bodies of the American servicemen killed in the rescue attempt.

Apr. 30—In London, 3 southern Iranian Arab gunmen take over the Iranian embassy, seizing 20 hostages; they threaten to blow up the embassy and kill the hostages if their demands for the release of 91 prisoners in Iran are not met by 7:00 A.M. May 1; they demand an airplane to take them and their hostages out of England. Ayatollah Khomeini refuses to meet their demands.

## Middle East

(See also *U.S., Foreign Policy*)

Apr. 7—Egyptian President Anwar Sadat arrives in Washington, D.C., for 2 days of talks with U.S. President Carter about Palestinian autonomy.

Apr. 10—Sadat returns to Egypt.

Apr. 14—Israeli Prime Minister Menachem Begin arrives in Washington, D.C., for 2 days of talks with U.S. President Carter to accelerate negotiations toward Palestinian autonomy.

Apr. 16—U.S. State Department officials report that Begin and Sadat have agreed to make a maximum effort to reach an agreement on Palestinian autonomy by May 26.

Apr. 17—Begin returns to Israel.

Apr. 28—Israeli Prime Minister Menachem Begin says that he will continue to oppose negotiating with the PLO even if the PLO withdraws its pledge to seek the destruction of Israel.

## Organization for Economic Cooperation and Development (OECD)

Mar. 18—Organization for Economic Cooperation and Development (OECD) Secretary General Emile van Lennep of the Netherlands announces that representatives of the 7 leading industrial nations will meet the weekend of March 22 in Versailles to discuss the rapidly rising price of oil and other common energy problems and to prepare for a summit conference on energy to be held in Venice June 22-23.

Mar. 26—In Paris, representatives of the OECD countries and the U.S. fail to agree on the amount of economic aid to be given Turkey in the coming year.

## Organization of Petroleum Exporting Countries (OPEC)

Mar. 27—Iran announces a 6 percent increase in the price of oil per barrel, to take effect April 1.

## United Nations

(See also *Israel; Lebanon; U.S., Foreign Policy*)

Mar. 1—The U.N. Security Council votes unanimously to deplore "the decision of the government of Israel to officially support Israeli settlement" in the Israeli-occupied Arab territories, "including Jerusalem." The U.S. vote to support the resolution was not anticipated.

Apr. 24—With the U.S. and the Soviet Union abstaining, the Security Council votes 12 to 0 to "strongly deplore Israel's military intervention" in Lebanon.

## AFGHANISTAN

(See also *Intl, Afghanistan Crisis*)

Mar. 10—In Kabul, Justice Minister Abdurrashid Aryan says that 42 associates of the late President Hafizullah Amin are being held for trial.

Mar. 19—The governing Revolutionary Council reports that a balanced budget for the fiscal year beginning March 21 was approved on March 16; foreign loans and grants, largely from the Soviet Union, will comprise about 30 percent of the anticipated revenues.

## ARGENTINA

Mar. 25—In Buenos Aires, despite U.S. objections, negotiations are successfully concluded for the sale of West German nuclear reactor components to the Argentine government. Argentina has agreed on safeguards for the construction of a heavy-water nuclear reactor.

Apr. 18—In Buenos Aires, the Inter-American Human Rights Commission accuses government security agents of killing "numerous men and women after detaining them" and of engaging in "systematic torture and other cruel and inhuman and degrading practices."

## BELGIUM

Apr. 3—Following a defeat in the Senate yesterday on his plan to restructure the constitution in order to give French and Flemish language groups greater equality, Prime Minister Wilfried Martens submits his resignation. King Baudouin asks Martens to stay in office.

Apr. 9—Unable to reconcile the disagreement over the constitution, Prime Minister Martens and his Cabinet resign.

## BOLIVIA

Mar. 26—The Cabinet resigns to permit Acting President Lydia Gueiler Tejada to appoint a neutral Cabinet in preparation for the June elections.

Apr. 8—Acting President Gueiler appoints a new Cabinet.

## CANADA

Mar. 3—Liberal party leader Pierre Elliott Trudeau is sworn in as Prime Minister.

Apr. 10—Defense Minister Gilles Lamontagne announces his government's decision to purchase F-18A fighter planes from the U.S. McDonnell Douglas Corporation; the contract amounts to about \$2.5 billion.

Apr. 14—Prime Minister Trudeau addresses the opening session of Parliament.

## CENTRAL AFRICAN REPUBLIC

Apr. 14—It is reported in Moscow that on January 22 the Central African Republic broke diplomatic relations with the U.S.S.R. and Libya. The government has accused Libya and the Soviet Union of subversive ac-

tivities in the Central African Republic and in Chad.

## CHAD

(See also *Central African Republic*)

Mar. 22—Leaders of rival Muslim groups, President Goukouni Oueddei and Prime Minister Hissen Habré, meet at a French military base to try to resolve the fighting between their troops in Ndjamena, the capital.

Mar. 23—In Ndjamena, the death toll is reported at more than 500 in 3 days of fighting.

Apr. 9—A cease-fire arranged yesterday is interrupted when fighting breaks out again in Ndjamena between forces loyal to President Oueddei and those loyal to Defense Minister Habré.

Apr. 28—France begins to withdraw its troops.

## CHILE

Mar. 28—President Augusto Pinochet names René Rojas Galdames to replace Hernán Cubillos as Foreign Minister.

## CHINA

(See also *Intl, International Monetary Fund*)

Mar. 14—Senior Deputy Prime Minister Deng Xiaoping's major policy speech, made privately in January, is published by a Hong Kong magazine. Deng says China's major foreign policy goals for 1980 are reunification with Taiwan and the restriction of Soviet expansion.

Apr. 16—The parliamentary committee of the National People's Congress appoints two new Deputy Prime Ministers: Zhao Ziyang, recently rehabilitated after his purge during the Cultural Revolution, and Wan Li, first party secretary in Anhui Province.

Apr. 17—Senior Deputy Prime Minister Deng Xiaoping says that Zhao Ziyang will conduct the "day-to-day work" of the government.

## COLOMBIA

Mar. 2—In Bogotá, Foreign Ministry officials meet with representatives of the terrorist group that seized 17 foreign diplomats and 12 other guests attending a reception at the Dominican Embassy on February 27; the terrorists, who call themselves M-19, are demanding the release of 311 left-wing political prisoners.

5 hostages are released by the terrorists.

Mar. 6—In Bogotá, the terrorists release Austrian Ambassador Edgar Karl Selzer for "humanitarian reasons."

Mar. 13—In their 5th meeting with the terrorists, government representatives agree to speed up trials for the political prisoners. President Julio Cesar Turbay Ayala insists that he is bound by the constitution and cannot grant pardons or commute sentences.

Mar. 17—Uruguayan Ambassador Fernando Gomez Fyns escapes from the Dominican Embassy.

Apr. 27—In Bogotá, 6 hostages are released from the Dominican Embassy; the guerrillas and the remaining 12 hostages, including U.S. Ambassador Diego C. Asencio, are flown to Havana, where the hostages are released. Asencio returns to the U.S.

## COSTA RICA

(See *Cuba*)

## CUBA

(See also *U.S., Foreign Policy*)

Apr. 1—In Havana, a Cuban guard stationed at the Peruvian embassy is killed when Cubans crash through the gates and seek asylum. The Peruvian authorities continue to refuse to turn the refugees over to Cuban authorities.

- Apr. 4—In Havana, in a change of policy, the government withdraws its guards from the Peruvian Embassy and says it will no longer attempt to prevent Cubans from seeking asylum at the embassy.
- Apr. 5—Interior Ministry officials tell the 750 people crowded on the grounds of the Peruvian Embassy that they are free to leave Cuba if another country agrees to accept them.
- Apr. 6—10,000 Cubans are reportedly seeking asylum at the Peruvian Embassy.
- Apr. 9—In Lima, an emergency meeting of the Andean Pact nations discusses the Cuban refugee problem.
- Apr. 14—In Washington, D.C., U.S. President Carter announces that under the emergency authority of the Refugee Act of 1980 the U.S. will admit 3,500 Cuban refugees.
- Apr. 16—At the airport in San Jose, Costa Rica, 230 Cuban exiles are greeted by Costa Rican President Rodrigo Carazo.
- Apr. 18—The government halts refugee flights to Costa Rica and says refugees must be flown directly to the countries where they are to be resettled and not to staging areas in Costa Rica.
- Apr. 19—In Havana, hundreds of thousands of Cubans take part in a parade of solidarity past the Peruvian Embassy.
- Apr. 20—In Havana, the Costa Rican Foreign Ministry informs Castro that Costa Rica will grant permanent asylum to all 10,000 Cubans seeking refuge at the Peruvian Embassy.
- Apr. 21—In Key West, Florida, the first boatload of refugees from the Peruvian Embassy arrives; the rescue mission by boat is mounted by Cuban exiles in Florida.

### EGYPT

(See also *Intl, Iran Crisis, Middle East; U.S., Foreign Policy*)

- Mar. 3—With the landing at Cairo airport of an El Al Israeli Airlines Boeing 707, commercial aviation flights are inaugurated between Israel and Egypt.
- Apr. 30—President Anwar Sadat opens the 1st tunnel under the Suez Canal, from Egypt to the Sinai; the 3½-mile tunnel took 16 months to build.

### EL SALVADOR

- Mar. 5—Héctor Dada Hirezi, a civilian member of the ruling junta, resigns.
- Mar. 6—The junta announces plans to expropriate 60 percent of the nation's farmland from large landholders. Troops have moved into plantation areas to effect the takeover. Landowners will be reimbursed with cash and long-term government bonds. A nationwide state of siege is imposed.
- Mar. 7—The junta announces the nationalization of all large private banks; the state will hold 51 percent of the shares of each bank and no one individual will be permitted to own more than 2 percent.
- Mar. 17—Government troops battle with leftist students at the National University; students are protesting the junta's increasing use of force; 47 people are reported killed.
- Mar. 18—Government troops withdraw from the university.
- Mar. 24—In San Salvador, Roman Catholic Archbishop of San Salvador Oscar Arnulfo Romero is killed by gunmen during mass.
- Mar. 27—To protest the increasing violence, 3 members of the junta resign: Education Minister Eduardo Colindre, Economics Minister Oscar Menjivar, and Deputy Min-

ister of Agriculture Jorge Villacorta. They leave the country.

- Mar. 28—It is announced in Washington, D.C., that the U.S. government will provide \$13 million in aid under agreements signed today.
- Mar. 30—In San Salvador, 31 people are killed and more than 200 are injured when bombs explode and shooting breaks out during the Archbishop's funeral.
- Apr. 7—The junta orders authorities to crack down on gun law violators; some 1,000 people have been killed since January 1.

### FRANCE

(See also *Intl, EEC*)

- Mar. 3—At the conclusion of a state visit by French President Valéry Giscard d'Estaing in Kuwait, a joint communiqué is issued, signed by President Giscard and Kuwaiti ruler Sheik Jaber al-Ahmad as-Sabah; it calls for Israeli withdrawal from Arab territory occupied in the 1967 war and for Palestinian self-determination.
- Mar. 10—President Giscard returns from his 10-day trip to the Persian Gulf oil countries.
- Mar. 12—The government formally endorses President Giscard's call for Palestinian self-determination.

### GERMANY, WEST

(See *Intl, EEC*)

### GREECE

- Mar. 14—In Athens, 400 members of the pro-Soviet Greek Communist party resign. They claim the party is "entirely dependent on the Soviet Union" and cite its support of the Soviet action in Afghanistan.
- Apr. 22—In Athens, U.S. and Greek officials sign a 5-year agreement for cooperation in economic, scientific and technological, educational and cultural affairs.

### HONDURAS

- Apr. 20—Elections are held for a constitutional assembly that will effect the transfer from military to civilian rule.
- Apr. 21—In the first nationwide elections in 9 years, the Liberal party wins a majority of seats in the constitutional assembly; the National party was expected to win.

### INDIA

- Mar. 17—Sanjay Gandhi, the son of Prime Minister Indira Gandhi, is acquitted of charges that he profited illegally from government contracts.
- Mar. 26—The government formally recognizes the Palestine Liberation Organization led by Yasir Arafat, who is scheduled to arrive March 28 for a state visit.
- Apr. 5—In Assam, the governor declares the state a "disturbed area," and prepares to force the Assam majority to stop protesting the presence of refugees from Bangladesh and migrants from other parts of India.
- Apr. 8—Jagjivan Ram, who resigned from the Janata party March 7, rejoins Indira Gandhi's Congress party.
- Apr. 11—Reversing a lower court ruling, the Supreme Court acquits Sanjay Gandhi of charges of theft and destruction.
- Apr. 14—In New Delhi, an assassination attempt is made on Indira Gandhi by a man with a knife, who misses Gandhi and slightly injures one of her bodyguards.
- Apr. 19—In Assam, the New Delhi government uses troops against protesters; 14 Assam politicians and many followers are arrested.
- In Assam, anti-government protests swell, and the government lifts its curfew.



- Apr. 20—In Assam, the Indian Army forcibly removes the pickets from the Gauhati oil facility, which remains closed because refinery workers are still on strike.
- Apr. 24—Gurbachan Singh, leader of the Nirankari sect, is assassinated.
- Apr. 26—In Assam, police arrest hundreds of demonstrators for violating a ban on demonstrations.

## IRAN

(See also *Intl, EEC, Iran Crisis; Iraq; U.S., Foreign Policy*)

- Mar. 5—Minister for Housing and Town Planning Mohsen Yahyaui says the Revolutionary Council is proposing that 6 million people living in Teheran be encouraged through incentives to move to the countryside.
- Mar. 9—Oil Minister Ali Akbar Moinefar says that in the last 4 days 12 oil pipelines have been blown up in Khuzistan Province.
- Mar. 14—Nationwide parliamentary elections are held.
- Mar. 17—Incomplete election returns give the Islamic Republican party, led by Ayatollah Mohammed Beheshti, 46 of the 69 seats that have been won so far; there are 270 seats at stake.
- Mar. 18—Ayatollah Ruhollah Khomeini issues a general amnesty for members of Savak, the Shah's secret police, soldiers and others who served the former Shah.
- Mar. 27—The Revolutionary Council postpones the 2d round of parliamentary elections indefinitely; President Abolhassan Bani-Sadr appoints a commission to investigate alleged voting irregularities.
- Mar. 29—Fighting is reported between Iraqi and Iranian troops along their mutual border.
- Apr. 8—In Teheran, Ayatollah Khomeini calls on the Iraqis to oust their President, Saddam Hussein. Iran orders all its diplomats to Iraq to return home.
- Apr. 11—In Unity Day celebrations in Teheran, President Bani-Sadr tells the crowd that "We will be sure the Iraqi regime will be overthrown."
- Apr. 19—At Shiraz University in southern Iran, fighting breaks out between leftist and fundamentalist students. Fundamentalist students are obeying yesterday's order from the Ayatollah to remove all left-wing political materials from the campuses. Similar clashes have occurred in Teheran, Isfahan and Mershed.
- Apr. 20—The Revolutionary Council closes all universities for 2 days; leftist political groups must end their activities on campus by April 21.
- Apr. 21—At Teheran University, fundamentalist civilians storm the campus to try to evacuate leftist students; several people are reported killed.
- Apr. 22—In Ahwaz and Resht, civilians attack the universities to force left-wing students off the campuses; 10 people are reported killed.
- Apr. 29—In Kuwait, terrorists fire on Foreign Minister Ghotbzadeh's motorcade; no one is injured.

## IRAQ

(See also *Iran*)

- Mar. 17—In Washington, D.C., U.S. administration officials report that equipment received from Italy will enable Iraq to manufacture weapons-grade plutonium.
- Apr. 1—In Baghdad, the Deputy Prime Minister and member of the ruling Revolutionary Command Council, Tareq Aziz, is wounded when a bomb explodes at the university.
- Apr. 6—In response to yesterday's expulsion of an Iraqi diplomat from Iran, the Iraqi government expels an Iranian diplomat. Iraq accuses Iranian leader Ayatollah

Ruhollah Khomeini of directing the recent bombings in Baghdad.

- Apr. 9—In Washington, D.C., U.S. intelligence reports indicate that armed Iranian exile groups opposed to Khomeini are receiving refuge in Iraq.

## ISRAEL

(See also *Intl, Middle East, U.N.; Lebanon; U.S., Foreign Policy*)

- Mar. 1—In Washington, D.C., U.S. officials report that the Israeli government has decided not to buy 100 or more fighter planes from the U.S.; instead, the government will develop and build the planes in Israel.
- Mar. 6—In a speech to Parliament, Prime Minister Menachem Begin says the U.N. Security Council resolution is not binding; the government will continue to permit settlements by Jews in occupied territories.
- Mar. 9—Cabinet Secretary Aryeh Naor announces that Speaker of Parliament Yitzhak Shamir will replace Moshe Dayan as Foreign Minister; Dayan resigned in October.
- Mar. 10—Finance Minister Yigael Hurwitz signs an expropriation order permitting Jews to establish a housing development on 1,000 acres owned by Arabs outside Jerusalem.
- Mar. 12—In Washington, D.C., the U.S. State Department condemns the recent Israeli decision to expropriate Arab-owned land outside Jerusalem.
- Mar. 16—Israeli authorities expropriate 375 acres of land on the outskirts of Bethlehem in the occupied West Bank of the Jordan River.
- Mar. 23—The Cabinet votes 8 to 6 with 3 abstentions to permit Jewish settlement in the occupied Arab city of Hebron. The government plans to establish 2 schools for Jewish studies there.
- Apr. 7—In Misgav Am, near the Lebanese border, Palestinian terrorists storm an Israeli kibbutz and take children hostages; the terrorists demand the release of guerrillas being held in prison. Israeli troops storm the kibbutz and kill 5 terrorists; several others, including one child, are also killed.
- Apr. 14—Prime Minister Begin leaves for Washington, D.C., to talk with U.S. President Jimmy Carter.
- Apr. 18—Begin returns to Tel Aviv.

## ITALY

(See also *Iraq*)

- Mar. 19—The Christian Democratic coalition government of Prime Minister Francesco Cossiga submits its resignation; earlier in the day the Socialist party announced it would no longer abstain from voting in Parliament.
- President Sandro Pertini asks Cossiga to head an interim government.
- Mar. 23—President Pertini asks Cossiga to form a new government.
- Apr. 2—The Italian Communist party refuses to attend a conference of European Communist parties on peace and disarmament in Paris at the end of April, accusing the Soviet Union of trying to reestablish its control over foreign Communist parties.
- Apr. 4—Francesco Cossiga forms a coalition Cabinet including Christian Democrats, Socialists and Republicans.
- Apr. 14—Italian police report the arrests of 45 people in the last few days on suspicion of being members of the Red Brigades.
- Apr. 15—The Italian Communist party establishes relations with the Chinese Communist party.



Apr. 20—Cossiga wins a vote of confidence in the Chamber of Deputies.

### JAPAN

(See also *Intl, EEC*)

Mar. 19—The Bank of Japan raises its discount rate to 9 percent from 7.25 percent.

Apr. 19—In Tokyo, the government announces that it will not pay higher oil prices to the Iranian government; Iran will cut off oil to Japan if it does not agree to the higher prices.

Apr. 24—The government joins the EEC in pledging to impose economic sanctions on Iran May 17; the government also encourages state trading companies to refrain from making any new agreements with Iranian firms.

### KOREA, SOUTH

Mar. 6—Colonel Pak Hung Ju is executed by firing squad for his involvement in the murder of President Park Chung Hee last October. The 5 other confessed assassins have appeals pending before the Supreme Court.

Apr. 14—Lieutenant General Chon Too Hwan, chief of the Army Security Command, is appointed head of the Central Intelligence Agency.

### LEBANON

(See also *Israel*)

Mar. 7—In Beirut, Lebanese Army troops replace 1,500 Syrian soldiers who are withdrawing from the Christian suburbs of Beirut.

Mar. 22—For the seventh day, Christian militiamen, led by renegade army Major Saad Haddad, shell Palestinian and leftist positions in southern Lebanon.

Apr. 6—U.N. peacekeeping forces are driven from their posts along the Israeli border by Christian militiamen under Major Haddad.

Apr. 8—Christian militiamen release 9 Irish members of the U.N. peacekeeping force captured yesterday in fighting near Al Tiri.

Apr. 9—In retaliation for the April 7 Arab Liberation Front attack on an Israeli kibbutz near the Lebanese border, Israeli troops and tanks enter Lebanon and set up outposts.

Apr. 12—Major Haddad's troops attack U.N. headquarters in Naqura after the Israeli withdrawal; 4 helicopters are destroyed and 1 U.N. soldier is killed.

Apr. 13—U.N. Secretary General Kurt Waldheim says that Israel has removed its troops from the area.

Apr. 17—Major Haddad's troops take over a U.N. observation post near the Israeli border and seize electronic monitoring equipment.

Apr. 18—In Naqura, 2 Irish soldiers in the U.N. peacekeeping force are shot and killed. U.N. spokesman Timur Goksel says the soldiers were probably shot in reprisal for the death of 2 Muslims killed in a battle April 12.

Apr. 20—In Dublin, a government official says Irish troops will not be withdrawn from the peacekeeping mission.

### LIBERIA

Mar. 9—Baccus Matthews, leader of the Progressive People's party, and 33 other party members are arrested on charges of treason. Last week the party called for a general strike to bring down the government of President William R. Tolbert, Jr.

Apr. 12—In an early morning coup d'etat in Monrovia, President Tolbert is killed; he is replaced by Master Sergeant Samuel K. Doe.

In an address over Monrovia Radio, Doe says the army staged the coup because of "rampant corruption." The army will remain in power indefinitely.

Apr. 13—Sergeant Doe names 15 members to a military-civilian Cabinet.

Apr. 17—In Monrovia, 3 soldiers and 1 civilian are executed by military firing squad for looting and rioting after the coup.

Apr. 22—In Monrovia, 13 officials, including ministers of the former government, are shot to death by firing squad; among those executed were Senate leader and brother of the former President, Frank E. Tolbert, and Foreign Minister Cecil C. Dennis, Jr.

Apr. 25—In Monrovia, Justice Minister Chea Cheapoo declares martial law and suspends the constitution indefinitely; executives of state-owned corporations, including foreign nationals, are placed under house arrest.

### LIBYA

Apr. 20—Libya and the Palestine Liberation Organization resume relations broken off in January, 1980; PLO representative Abu Tarek will reopen the PLO office in Tripoli.

### MEXICO

Mar. 24—Pemex, the national oil company, announces that it has capped the Ixtoc I oil well in the Gulf of Mexico; since June 3, 1979, more than 3 million barrels of oil have spilled into the Gulf.

### MOROCCO

Mar. 4—King Hassan II pays an unexpected visit to the Western Sahara; this is his first visit to the area since Morocco annexed the northern two-thirds of the former Spanish colony in 1975.

Mar. 5—In an interview in Marrakesh, King Hassan says that his government will not negotiate with the Polisario Front over the contested area of the Western Sahara.

### NETHERLANDS

Apr. 30—Queen Juliana abdicates in favor of her eldest daughter Beatrix. Squatters riot over the lack of housing as Beatrix ascends the throne.

### NIGERIA

Apr. 18—President Alhaji Shehu Shagari orders a judicial inquiry into charges that officials of the Nigerian Petroleum Company are corrupt; he suspends senior officials of the petroleum company.

### NORWAY

Mar. 30—Prime Minister Odvar Nordli orders an inquiry into the March 27 collapse of a floating platform in the North Sea oil fields, used by the Phillips Petroleum Company. 83 people are missing and presumed dead.

### PAKISTAN

(See also *U.S., Foreign Policy*)

Mar. 1—A Foreign Ministry spokesman reports that one of Pakistan's planes fired warning shots at a Soviet military plane and escorted it back to the Afghan border.

Mar. 5—In Islamabad, Foreign Minister Agha Shahi reports that the government has refused a U.S. offer of \$400 million in military and economic aid.

Apr. 8—The government rescinds the order placing former Prime Minister Zulfikar Ali Bhutto's wife and daughter under house arrest.

## PERU

(See *Cuba*)

## POLAND

Mar. 23—Nationwide elections for Parliament are held.

Mar. 25—In election returns, former Prime Minister Piotr Jaroszewicz (ousted last month) wins a seat in Parliament.

## RHODESIA

(See *Zimbabwe*)

## SAUDI ARABIA

Mar. 4—Princeton University officials announce that the university will receive a \$5-million grant from the Saudi government to expand its teaching and research in the life sciences. Princeton has agreed to assist the University of Riyadh to develop its life sciences training.

Mar. 18—In Jidda, the government reports that it has persuaded the Yemen government (Sana) to refuse more Soviet military advisers; instead, it will receive increased Saudi aid.

Apr. 23—Following the airing of a film on British television of a fictionalized account of a Saudi princess, the government asks Britain to withdraw its ambassador.

## SOUTH AFRICA

Apr. 22—In Cape Town, colored schoolchildren continue to demonstrate to protest segregated educational facilities; police fire tear gas to disperse some 8,000 protesters.

Apr. 24—Security Police arrest 8 black political activists in Johannesburg and in the Cape Peninsula.

## SPAIN

Mar. 9—In elections held today, the Basque Nationalist party wins a majority of seats in the regional Parliament.

Mar. 21—In Catalonia, a moderate Catalan party, the Democratic Convergence, wins 43 of the 135 seats in the regional Parliament.

Apr. 10—In Lisbon, Portugal, Spanish Foreign Minister Marcelino Oreja and British Foreign Secretary Lord Carrington issue a joint communiqué announcing that the two nations have agreed "to resolve ... the Gibraltar problem." Spain agrees to lift the blockade of the peninsula it imposed in 1969 after the citizens of Gibraltar voted to maintain British colonial status.

## SYRIA

(See also *Lebanon*)

Mar. 10—President Hafez al-Assad is reported to have encouraged the federations of trade and farmers unions to form militias to fight the fundamentalist Muslim Brotherhood.

Mar. 14—Troops are sent to Aleppo to put down opposition to the government of President Assad.

Mar. 19—The Syrian Arab News Agency reports that the government has replaced the governors of 3 cities, Idlib, Der'a and Deir ez Zor, in an attempt to curb unrest.

Mar. 31—In Aleppo, merchants and professional people begin a 24-hour general strike to protest their lack of political freedom, the corruption among the heads of state corporations and the detention of political prisoners. Underlying the discontent is religious friction; most Syrians are orthodox Sunni Muslims, but government officials are Alawite Muslims.

## TAIWAN

Apr. 18—A military court finds 8 opposition politicians guilty of sedition; 7 are sentenced to 12 to 14 years in prison, and 1 receives a life sentence. The charges grew out of a December, 1979, demonstration in Kaohsiung.

## THAILAND

Mar. 3—King Phumipol Aduldet appoints General Prem Tinsulanonda as Prime Minister; Tinsulanonda was elected by an overwhelming majority at a special joint session of Parliament.

## TUNISIA

Apr. 23—President Habib Bourguiba appoints Mohammed Mzali as Prime Minister to replace Hedi Nouira, who is ill.

## TURKEY

(See *Intl, OECD*)

Mar. 3—In Istanbul, 1,500 workers are arrested by security forces for illegally occupying a textile factory to protest the dismissal of 500 employees last month.

Mar. 8—Prime Minister Suleyman Demirel announces that the government has received \$3 billion in foreign aid from the U.S. and West Germany; the funds were needed to meet economic and financial responsibilities in 1980.

Mar. 29—In Ankara, U.S. Ambassador James W. Spain and Turkey's Foreign Minister Hayrettin Erkmen sign an agreement for the continued use by the U.S. of an air base and other installations in Turkey.

Apr. 6—President Fahri Koruturk leaves office at the end of his 7-year term. Speaker of the Senate Ihsan Sabri Caglayangil becomes Acting President until Parliament agrees on a successor.

Apr. 29—The government bans May Day celebrations in 30 provinces.

## UGANDA

Mar. 31—In Kampala, Tanzanian troops begin to withdraw; under a December, 1979, agreement between Uganda and Tanzania, Tanzanian troops were to remain in Uganda for 2 years; they are being withdrawn early because they lack popular Ugandan support.

## U.S.S.R.

(See also *Intl, Afghanistan Crisis; Central African Republic; U.S., Foreign Policy*)

Mar. 18—In Washington, D.C., U.S. State Department spokesman David Passage says many people in Sverdlovsk may have been accidentally contaminated by a "lethal biological agent" when a manufacturing plant exploded in 1979. Hundreds of people reportedly died of anthrax.

Mar. 24—The government reports that it has opened a seventh permanently staffed base in Antarctica, the first Soviet base established there since 1971.

Mar. 29—The government asserts that the unexplained deaths in Sverdlovsk were caused by an outbreak of anthrax, which resulted from improper handling of meat supplies and not from biological warfare germs as suggested by the U.S.

Apr. 8—Tass, the Soviet press agency, reports that a 600-megawatt electrical-capacity breeder reactor has gone into operation in the Urals.

Apr. 20—After an 11-month delay, Chinese Ambassador to the Soviet Union Yang Shouzheng takes up his post in Moscow.

Apr. 25—Foreign Minister Andrei A. Gromyko returns to

Moscow after talks with French President Valéry Giscard d'Estaing. He warns Pakistani President Zia ul-Haq not to continue to harbor Afghan insurgents.

Apr. 29—Amnesty International reports that more than 400 dissidents have been imprisoned or restricted in the last 4 years in the Soviet Union.

## UNITED KINGDOM

### Great Britain

(See also *Intl, Iran Crisis; Spain; Zimbabwe*)

Mar. 26—Chancellor of the Exchequer Sir Geoffrey Howe presents the government's budget to Parliament; the budget calls for reducing total public spending by 4 percent over the next 4 years.

Apr. 1—The Iron and Steel Trades Confederation and the National Union of Blast Furnacemen, Ore Miners, Coke Workers and Kindred Trades accept a 17 percent pay increase and return to work at the British Steel Corporation; the unions were on strike for 13 weeks.

## UNITED STATES

### Administration

(See also *Foreign Policy*)

Mar. 6—President Jimmy Carter sends Congress his 10-year, \$10-billion program for the conversion of some 107 power plants from oil to coal; when completed, the program is expected to save some 1 million barrels of imported oil a day.

Mar. 7—In Honolulu, district director of the U.S. Immigration and Naturalization Service L.H. Dahlin announces a revision in the 2-year-old policy of treating residents of the Northern Marianas Islands as U.S. citizens; they will now be treated as aliens but will be exempted from visa and passport requirements.

Mar. 10—Workers begin to vent small amounts of radioactive gas from a section of the Three Mile Island nuclear power plant; the plant was closed after an accident March 28, 1979.

Mar. 11—Attorney General Benjamin R. Civiletti says that he is "without statutory authority to appoint a special prosecutor" to investigate allegations of possible perjury by Treasury Secretary G. William Miller; a Justice Department investigation was already under way when the Ethics in Government Act of 1978 (under which a special prosecutor could be appointed) became effective.

Mar. 14—President Jimmy Carter announces a new program of "pain and discipline" to combat the rapidly rising inflation rate; he proposes a \$13-billion cut in federal spending to balance the 1981 budget; he will impose an immediate fee of \$4.62 a barrel on imported oil; he asks the Federal Reserve Board to place new controls on consumer credit; he establishes a voluntary pay raise standard of 7.5 to 9.5 percent.

The Federal Reserve Board imposes a sharp additional surcharge of 3 percentage points on its discount rates to large banks who are frequent borrowers from the Federal Reserve.

Mar. 19—The General Accounting Office reports that the safety control systems in the 2 U.S. plants that reprocess uranium used in nuclear reactors are inadequate to prevent the theft of products that could be used to make atomic bombs.

Mar. 24—To help U.S. companies comply with the Foreign Corrupt Practices Act of 1977, the Justice Department says it will advise companies planning to give money to foreign governments.

The Commerce Department announces that the U.S. will not raise import tariffs on leather goods, chiefly from

South Korea, or on tomatoes and some other produce from Mexico.

Mar. 31—President Jimmy Carter sends a revised budget for fiscal 1981 to Congress, calling for large cuts in services and benefits: total spending is estimated at \$611.5 billion, yielding a projected surplus of \$16.5 billion. On January 28, the President proposed a budget that called for \$5 billion more in spending, with a deficit of \$16 billion.

Apr. 9—White House sources report that the budget deficit for fiscal 1980 was underestimated by some \$1.1 billion because the estimate failed to take into account payments to laid-off automobile workers, who receive higher unemployment benefits if they are laid off because of foreign competition.

Apr. 11—The Equal Employment Opportunity Commission publishes a series of new regulations that are intended to eliminate physical or verbal sexual harassment of employees by supervisors in government or business.

Apr. 15—The 1979 income tax return filed by President Jimmy Carter and Rosalynn Carter is made public; the Carters claim a \$16,703.59 refund. Other documents show that the President's net worth declined nearly \$113,000 to \$893,304.35 as of the end of 1979.

President Jimmy Carter signs a proclamation extending for another 9 months the largely voluntary program setting temperature limits in non-residential buildings.

Apr. 21—Postmaster General William F. Bolger announces that the Postal Service will ask for a 28-percent rate rise; the price of first class mail would rise from 15 to 20 cents an ounce.

Apr. 29—The Environmental Protection Agency orders manufacturers of the weed killer 2,4-D to conduct new health risk studies; otherwise its use will be banned in 90 days.

Apr. 30—Former Budget Director Bert Lance is acquitted of 9 counts of bank fraud; a mistrial is declared because of a deadlocked jury on 3 other counts.

As of midnight, the Federal Trade Commission is temporarily unable to function because of a lack of funds.

### Economy

Mar. 7—The Labor Department reports that its producer price index rose 1.5 percent in February.

The Labor Department reports that the nation's unemployment rate fell to 6 percent in February.

Mar. 20—The Commerce Department reports a trade deficit of \$923 million for the 4th quarter of 1979, making a deficit of \$317 million for 1979, considerably less than the 1978 trade deficit of \$13.5 billion.

Mar. 25—The Labor Department reports that its consumer price index rose 1.4 percent in February, bringing the last 3 months' inflation rate to 17.2 percent annually.

Mar. 27—The price of silver on the world market, which has been falling from its January high of \$50.05 an ounce, drops \$10.82 an ounce to close at \$10.80 an ounce; the Dow Jones average falls some 25 points during the day but recovers all but a few points in the course of trading 63.7 million shares on the New York Stock Exchange.

Apr. 2—The Federal Reserve Board orders the issuers of credit cards to give their cardholders 30 days' notice of a change in payment terms.

Apr. 3—Most of the nation's large banks follow Chemical Bank's lead of yesterday and raise their prime rate to 20 percent.



The Federal Home Loan Bank Board authorizes its savings and loan associations to change interest rates on mortgages every 3 to 5 years (variable interest-rate mortgages); they are no longer required to offer a conventional fixed-rate mortgage as an alternative.

Apr. 4—The Labor Department reports that the nation's unemployment rate rose to 6.2 percent in March.

The Labor Department reports that its producer price index rose 1.4 percent in March.

Apr. 15—The Federal Reserve Board reports that industrial production in the U.S. fell 0.8 percent in March.

Apr. 16—The Chase Manhattan Bank and other large banks lower their prime rate to 19.5 percent.

Apr. 17—At a Washington, D.C., news conference, President Carter says that the economy "has slowed down and has probably entered a period of recession."

Apr. 23—The Chase Manhattan Bank lowers its prime rate to 19 percent.

The Exxon Corporation reports a record 1st quarter profit of \$1.93 billion, up 102.1 percent from last year.

Apr. 28—Morgan Guaranty Trust Company and other leading banks lower their prime rate to 18.5 percent.

Apr. 29—The Commerce Department reports that the U.S. foreign trade deficit fell to \$3.6 billion in March.

Apr. 30—The Commerce Department reports that its index of leading economic indicators fell 2.6 percent in March, the sharpest decline in 5½ years.

## Foreign Policy

(See *Intl. Afghanistan Crisis, Iran Crisis, Middle East; Cuba; Israel; Zimbabwe*)

Mar. 1—In the U.N. Security Council, the U.S. votes with the 14 other members to "deplore" the Israeli settlements in Israeli-occupied Arab lands; the resolution calls them illegal and asks the Israeli government to "dismantle the existing settlements." The U.S. vote against Israel is regarded as a policy shift.

Mar. 3—In a statement issued by the White House, President Jimmy Carter says that the March 1 U.S. vote in the U.N. Security Council approving a resolution condemning Israel's policy of settlements on the West Bank was the result of a "failure in communications" between the White House and U.N. delegate Donald F. McHenry and that the U.S. should have abstained from the vote.

Mar. 4—Secretary of State Cyrus Vance "accepts responsibility for this foul-up" (the U.S. vote on Israel), according to State Department spokesman Hodding Carter 3d.

West German Chancellor Helmut Schmidt arrives in Washington, D.C., for talks with President Jimmy Carter.

Mar. 5—Chairman of the Senate Foreign Relations Committee Frank Church (D., Idaho) says that his committee will hold hearings beginning March 13 on the U.S. vote against Israel in the U.N. Security Council.

After meeting with President Jimmy Carter in Washington, D.C., West German Chancellor Helmut Schmidt says that West Germany's initiatives toward joint policies with the U.S. in regard to Afghanistan, southwest Asia and the Soviet Union are limited because Germany is a divided nation.

After 6 weeks, the Senate confirms Robert White as the new Ambassador to El Salvador, with a 71-17 vote.

Mar. 6—Administration sources report that the U.S. has shelved plans for obtaining congressional approval for \$400 million in economic and military aid to Pakistan; Pakistan has already rejected the offer.

Mar. 8—At a White House news conference, President Jimmy Carter says that he believes that the Israeli policy

of settlements on the West Bank and the Gaza Strip is detrimental to negotiations over the future of these areas; the President says he disavowed the U.N. Security Council resolution of March 1 because it mentioned Jerusalem; during the Camp David accord talks, Israeli Prime Minister Menachem Begin and Egyptian President Anwar Sadat had agreed to deal with Jerusalem later.

Mar. 12—The Immigration and Naturalization Service reports that some 11,000 Iranians have entered the U.S., using various visas, since the seizure of the American hostages in Teheran.

Mar. 14—At a White House news conference, President Carter says that the U.S. will continue to comply with the terms of the SALT II treaty as long as the Soviet Union also complies; he says that "after consulting with the members of the Senate to determine an interest of our nation that might cause a rejection," he might renounce the treaty and "notify the Soviet Union that the terms of the treaty were no longer binding."

Mar. 18—The Commerce Department announces new and stricter controls over the export of computers, manufacturing technology and special materials to the Soviet Union.

Mar. 20—Appearing before the Senate Foreign Relations Committee, Secretary of State Cyrus Vance again accepts full blame for the U.S. Security Council vote on Israel; Vance says, however, the administration stands by the condemnation of the Israeli settlement policy on the West Bank and Gaza Strip.

Apr. 7—The Defense Department reports that the Soviet Union first notified the U.S. and then launched simultaneously a land-based missile and a submarine-based missile; the notification was required under the terms of SALT II.

President Carter says he will ask Congress to permit drawing on the some \$8 billion in Iranian government assets frozen in this country to settle American claims against Iran.

Apr. 9—The Agriculture Department says because of shipments from other exporting countries the Soviet Union will be able to meet five-sixths of its feed grain needs, despite the U.S. curtailment of shipments of grain.

At the conclusion of a 3-year, \$100-million reclamation project, Eniwetok islanders return home after 33 years to the site of 43 nuclear tests that were conducted from 1948 to 1958.

Apr. 20—Deputy Assistant Secretary of State for Security Karl D. Ackerman says that the State Department is seeking \$5.3 million in fiscal 1980 and \$35.8 million in 1981 to survey possible security measures to ensure the safety of American embassies in 15 politically troubled regions.

Apr. 21—According to White House sources, the U.S. has negotiated agreements with Kenya and Oman for the use of naval and air bases in exchange for economic and military aid.

The Treasury Department issues detailed regulations concerning commerce with and travel to Iran.

Apr. 23—The State Department warns boat captains carrying refugees from Cuba to the U.S. that they are breaking U.S. law and are subject to fines and boat seizure.

Apr. 24—Despite U.S. law, hundreds of small boats leave the Florida Keys for Cuba to bring back refugees.

Citing the 1973 War Powers Resolution, the Senate Foreign Relations Committee sends a letter to Secretary of State Cyrus Vance urging President Carter to consult with Congress before taking any military action to free the U.S. hostages in Teheran.



Apr. 25—President Carter announces the failure of a U.S. attempt to rescue the hostages last night; he says that the U.S. will continue to use "every possible avenue to secure the release of the hostages" and that "we continue to hold the government of Iran responsible for [their] safety ... and release. ..."

President Carter briefs some 2 dozen congressmen about the failed rescue plan.

Apr. 26—Senate majority leader Robert C. Byrd (D., W.Va.) says that on April 23 President Carter told him about a possible rescue mission; he says that "a minimum number of members of Congress" should have been consulted and that the House and Senate armed services committee should investigate the state of U.S. military equipment and preparedness.

A U.S. State Department spokesman says that U.S. laws will be "calmly but firmly" enforced to halt the flow of Cuban refugees.

After 2 years of study, the Presidential Commission on World Hunger reports that unless world food production increases markedly, the developing nations will face a major food shortage by 2000.

Apr. 27—Citing the reporting requirements of the 1973 War Powers Resolution, President Carter sends a letter to Congress in which he calls the rescue attempt "a humanitarian mission ... not directed against Iran" or "the people of Iran."

The U.S. carrier *Constellation* arrives in the Indian Ocean area, bringing the number of U.S. ships in the area to 34.

Apr. 28—Secretary of State Vance submits his resignation; he reportedly informed President Carter last week that whether the rescue operation succeeded or failed, he would resign. Vance opposed the mission.

U.S. customs agents in Key West seize 3 boats said to have brought 507 refugees from Cuba to Florida over the weekend.

Apr. 29—President Carter selects Senator Edmund S. Muskie (D., Me.) to succeed Cyrus Vance as Secretary of State.

Florida Governor Bob Graham urges President Carter to stop confiscating boats bringing Cuban refugees to Florida and to help the state of Florida handle the influx.

Apr. 30—Victor H. Palmieri, Coordinator for Refugee Affairs, says that the U.S. and Cuba have not discussed the exodus of Cuban refugees to the U.S.; since April 21, 62 boats with some 4,200 refugees have arrived in Florida.

### Labor and Industry

Mar. 19—The Firestone Tire and Rubber Company announces plans to close 5 of its tire factories and a synthetic rubber plant, laying off 7,265 workers.

Mar. 21—The United States Steel Corporation files an antidumping petition with the Commerce Department and the International Trade Commission against steel producers in 7 European countries.

The Commerce Department suspends a 2-year-old "trigger price mechanism" that has set minimum steel import prices.

Mar. 25—Secretary of the Air Force Hans Mark says that the Boeing Aerospace Company has been selected to produce some 3,400 cruise missiles at a cost of \$4 billion over the next 7 years.

Apr. 1—33,000 bus and subway employees strike New York City's transit system.

Apr. 11—Transit workers in New York City return to work; a 20-percent pay raise over 2 years is agreed on; a mail-vote ratification of the pact by the membership is to follow.

Apr. 15—The Ford Motor Company announces plans to close 3 plants with the loss of 15,100 jobs.

Apr. 16—The General Motors Corporation announces indefinite layoffs for some 12,000 workers.

Apr. 17—The United Steelworkers of America and the major manufacturers sign a new 3-year contract that provides wage and cost of living increases of approximately 30 percent over 3 years plus other benefits for some 288,000 workers at the 9 largest steel companies.

Apr. 25—The General Motors Corporation lays off some 18,000 salaried workers.

Apr. 26—The Labor Department reports that 132,000 auto workers will be eligible for the increased special unemployment benefits because they were laid off because of foreign competition.

### Legislation

(See also *Administration, Foreign Policy*)

Mar. 4—By a 9-6 vote, the Senate Judiciary Committee rejects President Jimmy Carter's nomination of North Carolinian Charles H. Winberry as a federal district judge.

Mar. 13—In a 302-107 vote, the House passes the compromise "windfall" profits tax on oil companies' profits from the sale of decontrolled domestic oil; the bill faces a Senate filibuster.

Mar. 17—President Jimmy Carter signs a bill increasing from 17,500 to 50,000 the number of refugees the U.S. will admit yearly; the bill also gives the President power to admit more refugees in an emergency. The House completed congressional action in a voice vote on March 4; the Senate passed the bill earlier.

Mar. 27—In a 66-31 vote, the Senate completes congressional action on the "windfall" profits tax on oil companies.

Mar. 31—President Carter signs the Depository Institutions Deregulation and Monetary Control bill; savers will enjoy increased interest on passbook savings, interest can be paid on checking accounts; other provisions regulate credit, savings and mortgages.

Apr. 2—President Carter signs the law taxing oil industry "windfall" profits.

### Military

Mar. 8—In testimony before the Senate and House Armed Services Committees, the commander in chief of the Strategic Air Command, General Richard H. Ellis, says that "an adverse strategic imbalance" favoring the Soviet Union has developed in the nuclear force balance between the U.S. and the Soviet Union.

Mar. 25—Defense Secretary Harold Brown tells a House appropriations subcommittee that the proposed MX missile program is the Defense Department's "most important new program" to counter Soviet missile power.

### Politics

Mar. 1—Former President Gerald Ford says he will respond as a candidate provided there is a "truly broad-based" urging by his party.

Mar. 4—In Massachusetts, Senator Edward M. Kennedy (D., Mass.) defeats President Jimmy Carter in the Democratic presidential primary; in the Republican primary, Representative John Anderson (R., Ill.), Texan George Bush and former California Governor Ronald Reagan tally almost equal votes, with Bush the winner.

Mar. 5—Senator Howard Baker (R., Tenn.) withdraws from the race for the Republican presidential nomination.

Mar. 9—After losing to Reagan in the Republican presidential primary in South Carolina, former Texas Governor John Connally withdraws as a candidate.

Mar. 11—President Jimmy Carter and Ronald Reagan win their primaries in Florida, Alabama and Georgia.

Mar. 15—Former President Gerald Ford says he will not be a candidate for the Republican presidential nomination because his candidacy "would further divide my party."

Senator Bob Dole (R., Kan.) withdraws as a candidate for the Republican presidential nomination.

Mar. 18—President Carter and Ronald Reagan win their primaries in Illinois.

Mar. 25—Kennedy defeats the President in primaries in Connecticut and New York; Reagan wins in New York and loses to Bush in Connecticut.

Apr. 1—Reagan defeats Bush in Wisconsin's presidential primary; Carter defeats Kennedy.

Apr. 21—Bush wins a substantial victory over Reagan in the Pennsylvania presidential primary; President Carter loses to Kennedy by a narrow margin in the Pennsylvania primary.

Apr. 24—Representative John B. Anderson drops out of contention as a Republican presidential contender and announces his candidacy for the office on an independent ticket.

Apr. 30—The White House announces that President Carter will begin to campaign outside Washington, D.C.

### Science and Space

Mar. 5—The National Cancer Institute, the Harvard University School of Public Health and the American Health Foundation report that, contrary to previous studies that had led the Food and Drug Administration to restrict the use of saccharin, their studies show that there is little or no risk of cancer of the bladder or the urinary tract from its use.

Mar. 27—Mt. St. Helens in Washington, dormant for 123 years, erupts with clouds of steam and ashes.

### Supreme Court

Mar. 3—In a 5-2 vote, the Supreme Court reverses 2 lower court decisions and rules that former Secretary of State Henry Kissinger's transcripts of his telephone conversations from the White House and the State Department (which he took when he left office) have in effect been removed from the jurisdiction of the Freedom of Information Act; the transcripts are in the custody of the Library of Congress with a deed from Kissinger barring their public disclosure for 25 years.

Mar. 19—The Court rules 6 to 1 to reject a constitutional challenge by the Mobil Oil Corporation against Vermont's imposition of a corporate income tax on dividends earned overseas by Mobil affiliates.

Mar. 25—The Supreme Court unanimously reverses a decision of the U.S. Court of Appeals for the District of Columbia and rules that the victim of a crime should be permitted to identify the accused at a trial even if the accused has been arrested and detained illegally.

Apr. 15—In a 6-3 decision, the Supreme Court reverses a New York Court of Appeals decision; it invalidates the law in 22 other states as well when it rules that police must obtain a warrant in order to enter a suspect's home to make an arrest.

Apr. 16—In a 5-4 decision, the Supreme Court rules that all violations of civil rights by a local government, even if the government's employees acted in good faith, make the local government liable to suits under the Civil Rights Act of 1871.

### Terrorism

Mar. 12—Puerto Rican terrorists ambush 3 U.S. Army officers as they drive along a San Juan, Puerto Rico, freeway; one officer is wounded slightly by flying glass.

Mar. 15—4 armed members of the Puerto Rican terrorist group Fuerzas Armadas de Liberación Nacional (FALN) invade the New York headquarters of George Bush, bind 10 workers and spray slogans on the walls; a similar attack is mounted against the Carter-Mondale campaign headquarters in Chicago; no one is injured in either attack.

### YEMEN, SOUTH

(See also *Saudi Arabia*)

Apr. 21—In Aden, following a meeting of the Central Committee, President Abdel Fattah Ismail submits his resignation because of a policy dispute; he is succeeded by Prime Minister and secretary general of the Yemeni Socialist party Ali Nasser Mohammed.

### ZAMBIA

Apr. 4—In a conference hosted by Zambia, representatives of 9 African nations—Angola, Botswana, Lesotho, Malawi, Mozambique, Rhodesia, Swaziland, Tanzania, and Zambia—agree to reduce their economic dependence on South Africa.

### ZIMBABWE

Mar. 4—Official election returns give the party of Robert Mugabe, the Zimbabwe African National Union Patriotic Front, 57 of the 80 seats reserved for blacks; 20 seats are reserved for whites. Mugabe's party wins an absolute majority.

In a press conference, Mugabe assures whites that their farmland will not be seized, that he will honor the pension rights of those in government, and that the capitalist base of the economy will be maintained.

Mar. 10—Eddison Zvobgo, spokesman for Prime Minister-elect Mugabe, announces that Joshua Nkomo, Mugabe's partner in the Patriotic Front Alliance, will become the Minister of Home Affairs.

Mar. 11—Mugabe is formally appointed Prime Minister by British Governor Lord Soames. Mugabe announces the composition of his 23-member Cabinet, which will include 2 whites. Associates of Nkomo are appointed to the posts of Natural Resources and Water Development, Public Works, and Posts and Telecommunications.

Mar. 20—Lord Soames lifts the 2-year-old declaration of martial law.

Apr. 18—In Salisbury, the former British colony of Rhodesia becomes the independent nation of Zimbabwe and a full member of the Commonwealth. British Prince Charles officiates at the independence ceremony.

In Salisbury, the U.S. government opens its embassy. The U.S. and Zimbabwe sign a \$2-million aid agreement.

In Washington, D.C., U.S. President Carter names Robert V. Keeley as ambassador to Zimbabwe.

Apr. 19—Prime Minister Robert Mugabe and his Cabinet are sworn in.

Apr. 20—Finance Minister Enos Nkala announces the government's budget; the budget reduces the sales tax from 15 percent to 10 percent on many items and increases the prices of tobacco and alcohol.

Apr. 21—The government orders the release of 9,000 prisoners throughout the country.

Apr. 24—In Salisbury, more than 400 people are arrested following fighting between supporters of former Prime Minister Abel T. Muzorewa and guerrilla leader Joshua Nkomo. ■

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